

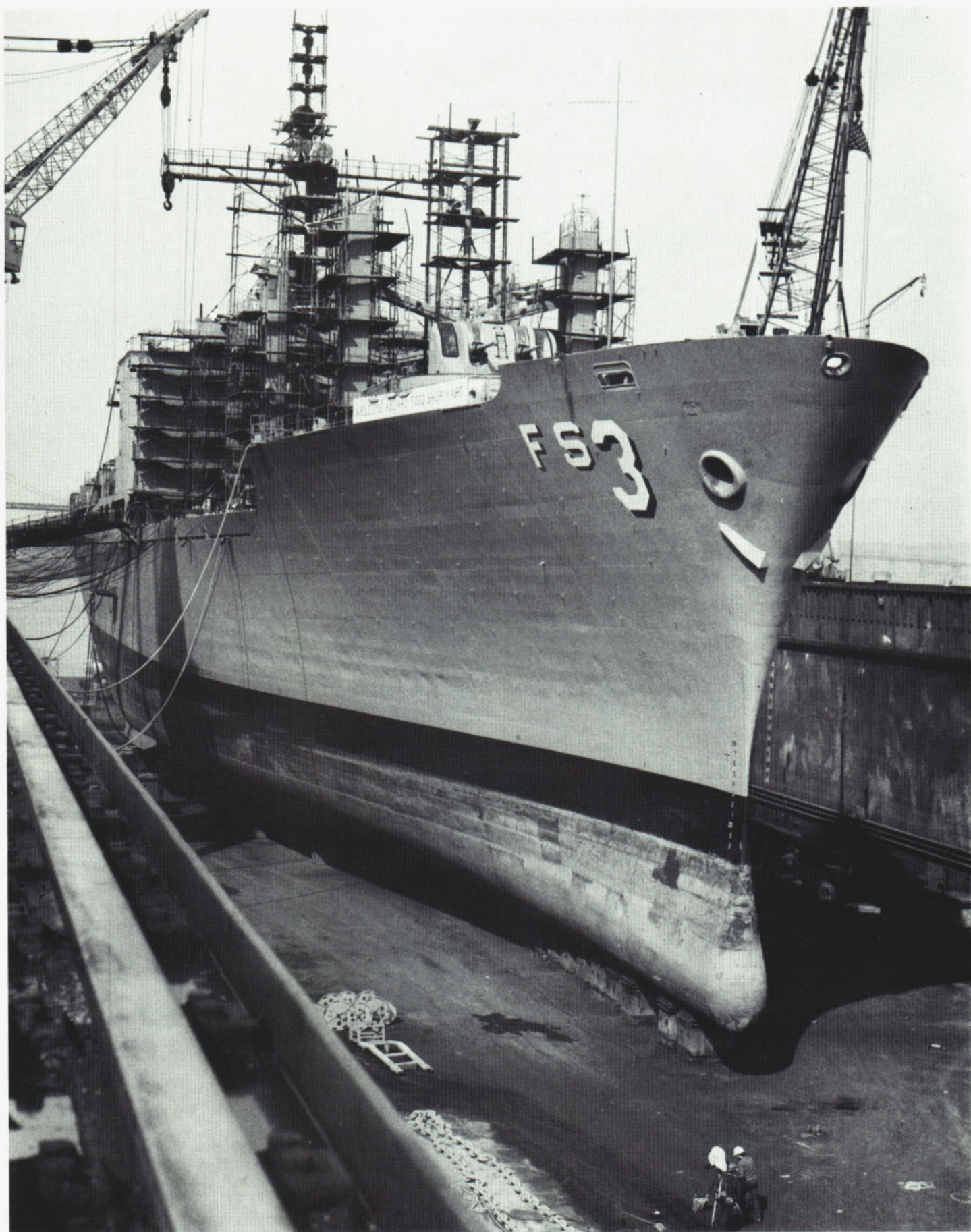
# ALL HANDS

NOVEMBER 1983



Plebes Take to the Water



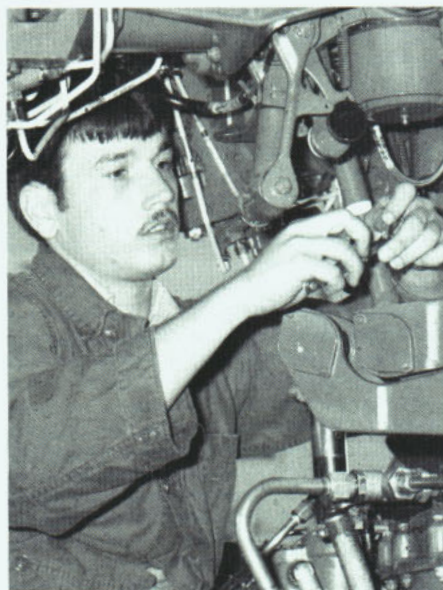


*USS Niagara Falls (AFS 3), in dry dock at Todd Shipyard, San Francisco, Calif., prepares for its home port change to Guam. Niagara Falls is a combat stores ship tasked with replenishing fleet units with everything from food to fuel, repair parts, fresh and frozen provisions, and more. Photo by JO2 Russell L. Coons.*





Page 26



Page 36



Page 42

# ALL HANDS

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## 2 GOING HOME—TO IOWA

Former crewman revisits the battleship

## 8 ENGINEERING DUTY OFFICER SCHOOL

Preparing officers for specialized duty

## 12 CASH FOR YOUR IDEAS

Write it down, send it in—you might be rewarded

## 18 SAILING

A different kind of classroom for academy plebes

## 26 WHO TAKES CARE OF THE HOSPITAL?

A good hospital means more than doctors and nurses

## 28 OUR NAVY MEN IN PANAMA

Combat harbor patrol safeguards the canal

## 36 JUST PLAIN HARD WORK

Patuxent River aircraft testing involves teamwork, precision

## 42 SEEKING MORE RESPONSIBILITY

Sailors of the year are goal-oriented

## 46 MOBILE AIRFIELDS OF THE SEA

The *Nimitz*-class carriers

## Departments

### 22 Bearings

### 40 Currents

## Covers

Front: U.S. Naval Academy plebes battle for the lead during the Rear Admiral Blakely Cup Race on the Severn River at Annapolis, Md. Photo by PH2 Perry E. Thorsvik  
 Back: Members of Combat Harbor Patrol Division, U.S. Naval Station Rodman, Panama, on joint riverine warfare exercises with the U.S. Army on the Chagres River in Panama. Photo by JO1 P.M. Callaghan, NIRA Det 206.

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# Going Home

By Cmdr. George P. Woodward Jr.,

*Thomas Wolfe said, "You Can't Go Home Again."*

*In this sailor's case, however, he's only partially right; I went back to what was my home 26 years ago—the battleship USS Iowa (BB 61).*

*In 1957, I was discharged from active duty on board Iowa as a second class petty officer. That was after a midshipman training cruise to Rio de Janeiro and Trinidad. The Iowa made one more brief cruise to Scotland for a NATO exercise, then joined the inactive fleet in Philadelphia where it has rested for 25 years until just last fall.*



Author George P. Woodward Jr. on board USS Iowa (BB 61) in early 1957 when he was an aerographer's mate second class.

*I went to the Philadelphia area, too, but instead of to mothballs, I went to college. As the years passed, I would see Iowa occasionally, tied up alongside USS Lake Champlain (CV 39), the ship that I served on before reporting to Iowa. They were tied up with other ships of the mothball fleet near the Philadelphia Airport, visible below from planes taking off or landing.*

*Little did I dream then that Iowa would again see active service. Nor did I dream that one day I would get the opportunity to board Iowa again. This past summer—as a reservist on active duty—I got my chance.*





# — to Iowa

In September 1982, *Iowa* was towed to New Orleans where the first phase of its reactivation began. There, in dry dock, necessary work was completed on the hull, two rudders and four huge propellers. Shipyard workers began the task of removing obsolete equipment such as the bunk I had slept in—really just a piece of canvas strung with rope to a metal frame that could be lashed against the bulkhead during the day.

Today's sailors sleep on comfortable foam-rubber mattresses in bunks with privacy curtains and reading lights.

In January 1983, *Iowa* was under tow, this time to Pascagoula, Miss. There, 1,500 workers are completing the reactivation and modernization at a total cost of approximately \$385 million.

Why not just build a new ship? Basically, *Iowa's* hull, superstructure, powerful engines and 16-inch guns are in almost as good condition as they were when the battleship was commissioned on George Washington's birthday in 1943.

Of the 40 years since, only 12 were spent in active service, making *Iowa* relatively "young" compared with many ships in the fleet. Twice, at the end of World War II and in 1958, it was preserved and protected in the Navy's mothball fleet where temperature and humidity are carefully controlled to prevent corrosion and deterioration. In fact, when *Iowa* was opened up before removal from Philadelphia, one of the first people inside remarked that it looked like the crew had just left for a weekend. Old memos and other papers hadn't even yellowed.

The modernized *Iowa* will increase the operating Navy's capability much earlier than building a new ship from scratch, and for about the cost of a frigate. The armor

plating on *Iowa* is very thick in many places and even thicker around the propeller shafts. The turrets of the 16-inch guns and the conning tower are constructed of hardened steel.

Part of the modernization package includes modern air—and—surface search radar and, for defense against aircraft or missiles, four of the *Phalanx* close-in weapon systems. Each system is capable

of firing up to thousands of rounds of ammunition very quickly. Add to this a 30 knots or more speed, and *Iowa* is far from a sitting duck.

Its 16-inch guns fire 2,700-pound projectiles. Ask any former infantryman from World War II, Korea or Vietnam how comforting it was to know there was a battleship offshore, softening up hostile positions.



Left: The skill of artist Richard Allison capture the essence of *Iowa*. Right: With the aid of Navy tugs, *Iowa* moves down the Delaware River toward the open sea.





*Iowa* also will keep 12 of its 5-inch guns.

Adding an even bigger punch will be eight armored quadruple box launchers for *Tomahawk* cruise missiles and four quadruple box launchers for *Harpoon* missiles.

Other parts of the modernization package include installation of modern communications and electronic systems, conversion of boilers to burn Navy diesel fuel, a marine helicopter capability, air conditioning, and a sewage collection and holding system to meet present-day anti-pollution standards.

What's it like going aboard after a 26-year absence?

First, I'm still impressed with the massiveness of a battleship. At 887 feet, 3 inches from stem to stern, the deck is just slightly shorter than the length of three football fields, and only about 200 feet shorter than our largest aircraft carrier. Yet *Iowa* is sleek, 108 feet, 2 inches wide, purposely designed to transit the Panama Canal with just a foot or so to spare.

From its keel to the top of the mast, *Iowa* is 209 feet tall, or about as tall as a 20-story building. Its four geared-turbine engines, each of 53,000 horsepower, can move it through the water at speeds in excess of 30 knots.

The compartment on the bridge in which I worked, and occasionally slept on a camp cot during hot weather, seems tiny and cramped, even with all equipment removed. I have a closet or two in my home

*Cmdr. Doug Meyer, in charge of the task element responsible for transferring the battleship Iowa from Philadelphia to the Gulf Coast, talks about the journey after the safe delivery of the ship.*

that are larger. They've sealed the only porthole in the compartment and right outside is a steel platform for one of the *Vulcan*, *Phalanx* launchers. Getting through the narrow passageways and up and down the ladders wasn't as easy for me as it was 26 years ago.

Everywhere you look, shipyard workers in hard hats are cutting out or welding in steel plates; sparks from acetylene torches make it look like a Fourth of July celebration. Huge cranes alongside the dock are lifting equipment on and taking it off. Stacks of blueprints are everywhere; somehow, skilled yard workers are able to figure out what comes off and what goes on and where.

In an open area adjacent to the ship, the 5-inch gun housings are being refurbished; the gun barrels were sent to the Naval Ordnance Command, Louisville, Ky., for reworking. The 16-inch guns point in all directions as workers inside the huge turrets work on the hydraulic systems and get them ready for firing again.

Down inside the ship, a maze of ducts brings in fresh air for the workers while miles of hoses carry acetylene and oxygen for the welders. Subassemblies, crates, boxes and parts lie everywhere, yet there

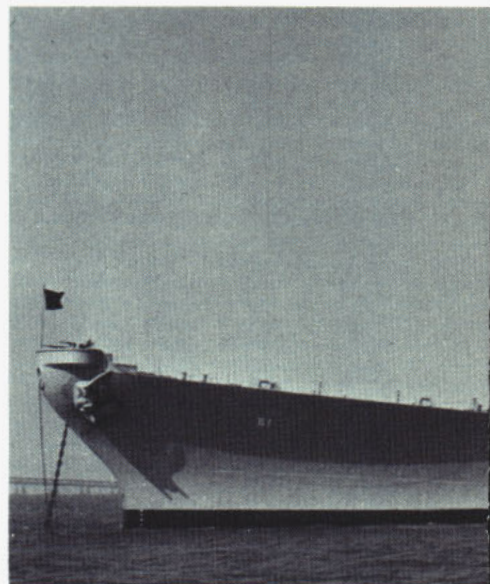
is organization and a timetable for when and where everything goes.

The dentist chairs and equipment, lockers, sick bay equipment and other gear that will stay on board are carefully protected with plastic wrapping. Remove the plastic, and it would appear that the dental lab and sick bay could begin handling patients immediately.

A battleship is a floating city for as many as 3,000 officers and men during war time. Huge refrigerated compartments are designed to hold tons of fresh and frozen food right next to huge magazines. In the laundry, the steam-pressing machines are ready and waiting. Still on the bulkheads are signs telling what division was once

*Iowa's* first assignment after commissioning in 1943 was in the North Atlantic to neutralize the threat from the German battleship *Tirpitz*, then reportedly in Norwegian waters and set to strike in the North Atlantic.

That fall, it carried President Franklin Delano Roosevelt and his party to Casablanca, in North Africa, on the first leg of his journey to the historic Teheran Conference with Winston Churchill and Joseph Stalin. *Iowa* then returned the pres-





responsible for this compartment.

They are welding shut what were the portholes in the projection booth that showed movies to the crew at night on the fantail. This structure will become the aviation service center. A closed-circuit TV system will be installed for the crew's entertainment and to keep them informed.

Words like impressive and massive just don't do a battleship justice. Upon completion in mid-1984 when *Iowa* joins its sister ship USS *New Jersey* (BB 62), recommissioned last December, it will help provide naval gunfire needed to support amphibious operations of any U.S. forces on beaches or in coastal waters anywhere in the world.

Battleships like *Iowa* can serve as the predominant unit of a surface ship action group working with carrier battle groups or as an independent force when there is a greater need for carriers elsewhere. They also have the ability to be a formidable naval presence, showing the U.S. flag to friend and foe alike in various parts of the world easily reached because of the ship's long operating range.

A relic of days gone by? Hardly. As Vice Admiral Robert L. Walters told Congress in 1981, "Reactivation of the four *Iowa*-class battleships will provide the United States with an impressive augmentation of offensive combat capability in the most survivable warships ever built.

With the addition of modern cruise missiles to the already impressive conventional gun battery these ships possess, and a modern missile defense capability through the close-in weapon system, they will become a welcome addition to any battle force."

To date, more than 3,700 retirees and reservists have answered the call to return to active duty aboard *Iowa*. A large number of active duty people also have volunteered to serve.

Perhaps years from now, its crew of the 1980s will look back fondly on their duty aboard USS *Iowa*—just as I do. Perhaps they'll long for a chance once again to serve aboard a battleship in the U.S. Navy.

## A Proud History

ident safely to the United States.

Because of its speed and endurance, it took four different groups of destroyers, operating in relays, to guard *Iowa* and the president on each part of the round trip.

*Iowa* transited the Panama Canal in early 1944 and reported to the Pacific Fleet. It participated in strikes against hostile positions from the Southern Pacific to the Japanese mainland. In June 1944, it participated in the "Marianas Turkey Shoot."

*Iowa*'s gunners helped repel four mas-

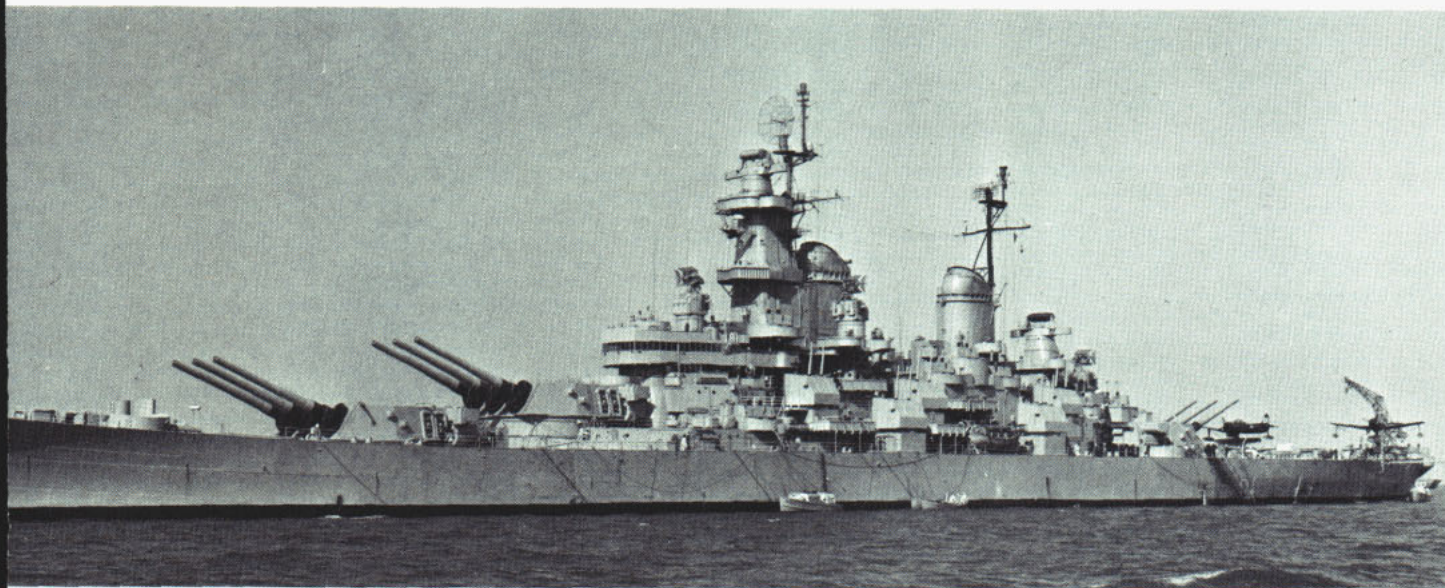
sive air raids on the fast carrier task force, resulting in the almost total destruction of Japan's carrier-based aircraft. Two hits from Japanese 4.7 projectiles did only minimum damage to the ship.

In August 1945, *Iowa* steamed into Tokyo Harbor to land occupation troops and to play a dominant part in the Japanese surrender.

In 1949, it was decommissioned and placed in the mothballs in San Francisco, only to be recalled in 1951 to support

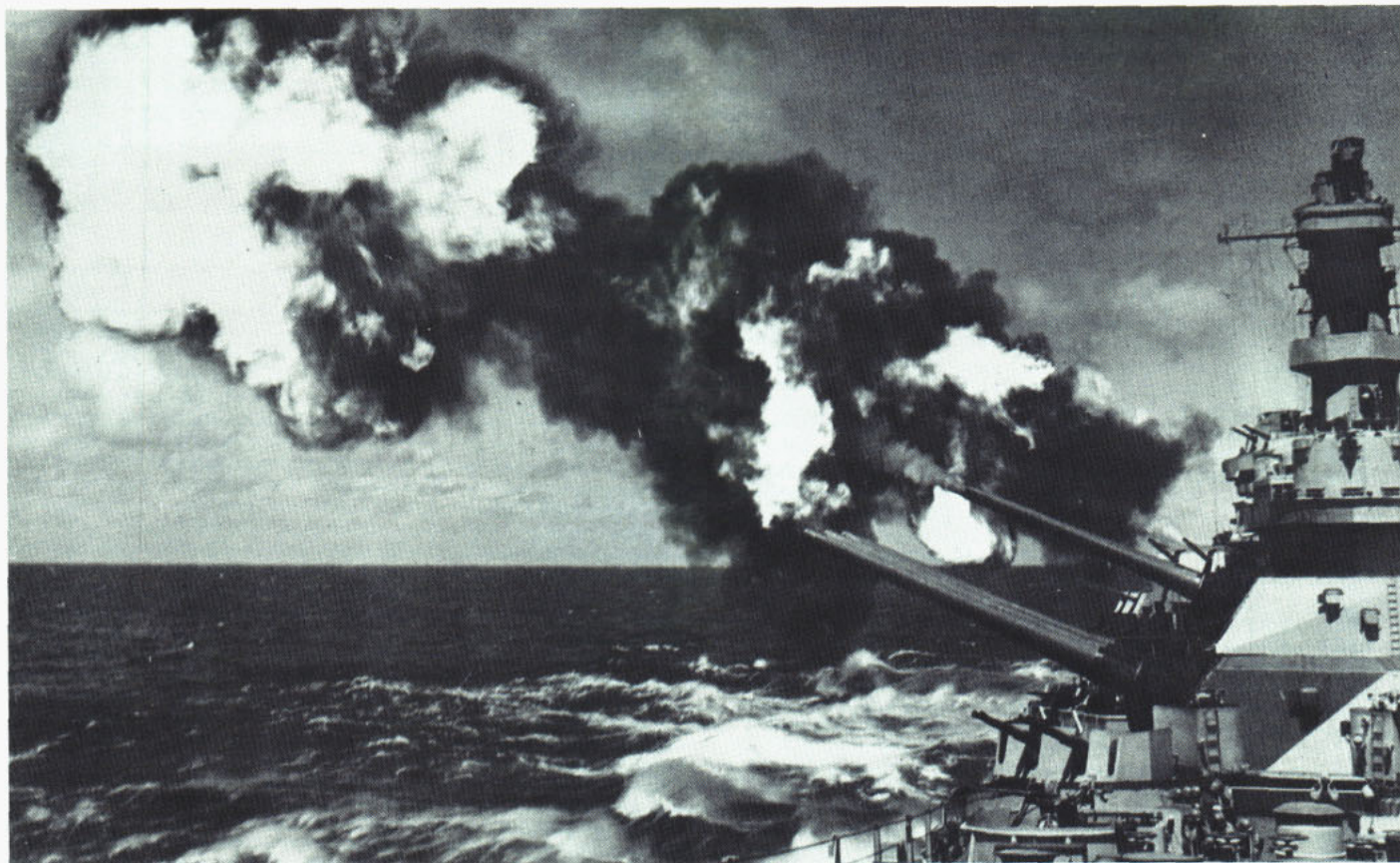
United Nations' forces in Korea. *Iowa*'s big guns silenced shore batteries and provided support gunfire for American and United Nations' ground troops. Following the end of the Korean War, *Iowa* returned to the Atlantic, taking part in various NATO exercises and serving as Sixth Fleet flagship in the Mediterranean.

It was decommissioned in February 1958 and placed again in mothballs in Philadelphia until late last year. *Iowa* earned 11 battle stars.





# Keeping the Big Guns Safe



KA-BOOM! A 2,700-pound projectile fires from a 16-inch gun, spiraling through the 68-foot barrel and hurtling at twice the speed of sound toward its target some 23 miles away. In 30 seconds, another eight rounds are fired. With each 700-degree Fahrenheit, high-pressure blast of a huge projectile through the mammoth gun, the barrel deteriorates a bit.

To keep the guns safe, the Navy has set stringent wear limits on its gun barrels. A barrel must be replaced when its safe wear limit is exceeded.

Of course, barrels must be checked periodically to determine wear. The Navy requires these inspections annually on all its guns. But few installations in the Navy today have the expertise to inspect the intermediate- and large-caliber guns aboard battleships.

During the reactivation of USS *New*

*Jersey* (BB 62), the Naval Surface Weapons Center at Dahlgren, Va., was among the activities called on to inspect the condition of the 5-inch/38-caliber and 16-inch/50-caliber guns aboard the battleship. During the inspection, severe wear in four 5-inch gun barrels and damage to one 16-inch gun barrel were detected. The worn 5-inch barrels were replaced and the damage corrected on the 16-inch barrel.

Since battleships are the only U.S. Navy vessels that carry their own gun inspection equipment, NavSWC also instructed *New Jersey* crew members in proper procedures for inspecting barrels.

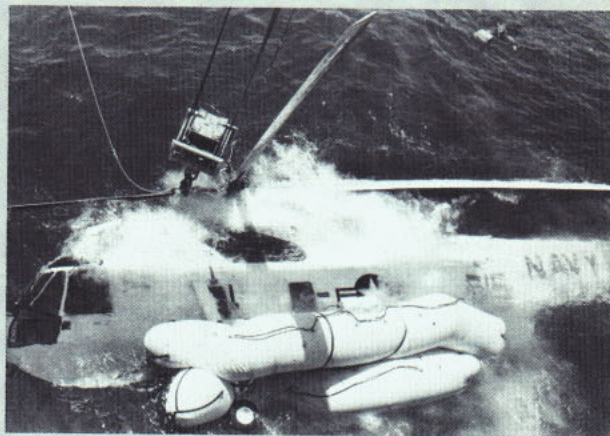
As *New Jersey* started sea trials last fall, *Iowa* (BB 61) was towed from her berth at the Naval Inactive Ship Maintenance Facility Detachment in Philadelphia to begin reactivation. As with *New Jersey*, *Iowa*'s guns also needed to be inspected.

NavSWC's inspection was different this time, however, because the battleship was just starting overhaul, and the crew was unable to assist in the inspection. Since all of *Iowa*'s 5-inch guns had been removed for overhaul and the installation of new barrels, NavSWC was limited to inspecting the nine 16-inch guns. Still, it was reported that the barrels of those big guns are in excellent condition.

Whereas *New Jersey* was recommissioned during the Vietnam War, *Iowa* had been in reserve since 1958; it last saw service during the Korean War. *New Jersey*'s 16-inch barrels showed an average of 40 percent of allowable wear when they were inspected during the ship's reactivation last year. On the other hand, the NavSWC team found *Iowa*'s big gun barrels to be almost as good as new—wear ranged from 3.8 to 7 percent of the allowable limit.



# New Life for Downed Helo



In a race against time, the combined efforts of USS *Saratoga* (CV 60), aircraft from two helicopter anti-submarine squadrons, and members of an explosive ordnance disposal group detachment recently saved "Troubleshooter 615," a multimillion dollar Navy helicopter.

That operation was one of the first successful recoveries of a downed and inverted SH-3 Sea King helicopter from the Atlantic.

"Troubleshooter 615," from Helicopter Anti-submarine Squadron Three, developed major mechanical difficulties and was ditched 90 miles east of Jacksonville, Fla. Aboard were pilot Lieutenant Wade J. Gerrard, co-pilot Lieutenant Junior Grade Karl A. Rabenhorst, first crewman Aviation Anti-submarine Warfare Operator Second Class Joseph L. Dalora and second crewman Aviation Anti-submarine Warfare Operator Third Class Brian E. Culliton.

Just moments after the emergency water landing, rescue operations began, and one of the other four helicopters operating with "Troubleshooter 615" rescued the crewmen and returned them safely to *Saratoga*.

While the crew was being rescued, another helicopter which had also been operating with the "Troubleshooter" flew to *Saratoga* to pick up flotation equipment and specially trained personnel. Minutes later, six sailors entered the cold waters. Only the nose of "Troubleshooter 615" remained above water.

Four aircrewmembers struggled in the sea for 20 minutes trying to attach flotation bags and a flotation collar. Once the collar was attached, two explosive ordnance disposal divers maneuvered a sling under the helicopter so that *Saratoga* crew members

could later attempt to raise the downed aircraft onto the ship.

When *Saratoga* arrived, "Troubleshooter" was just barely underwater due to its flotation collar. That position enabled a boat crew to tow the aircraft to a recovery station where teams of sailors waited to position it near the crane on the ship's starboard side.

Up to this point, the rescue operation had progressed smoothly. However, it was at this stage of the rescue that several helicopters had been lost or severely damaged in past recovery attempts.

"It was really a hairy situation," Aviation Ordnanceman First Class Frank J. Magner said. "The lifting line wasn't long enough so we had to go with the surges to lift the bird enough to connect the line."

Unlike past experiences, the line was

connected successfully and the slow process of rotating the aircraft began. When the helicopter's position was stabilized, the main hoisting hook was connected to the sling that was already in place. Then the aircraft was carefully lifted by crane out of the water and onto the carrier's deck.

With "Troubleshooter" safely on board, *Saratoga*'s maintenance crews began the tedious task of removing the salt water trapped inside the frame. Without such maintenance, all of the metal on the helicopter would have corroded.

As a result of the quick action and teamwork, the Navy has back in service a helicopter that cost \$1.5 million when new in 1969; today's replacement cost is estimated at \$10 million.





# Engineering Duty Officer School

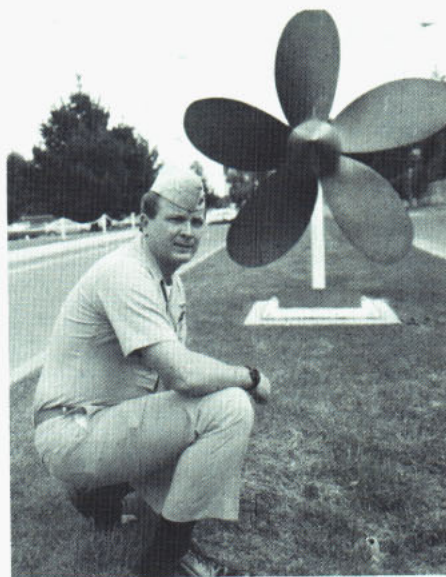
The Engineering Duty Officer School at Mare Island, Calif., is the Navy's principal training activity for restricted line officers who provide the Navy with technical expertise and practical engineering judgment in all aspects of a ship's life cycle. Naval officers first, technical experts second, these men and women provide the crucial link between the operational requirements of a ship at sea and the technological and industrial base ashore.

Like military engineers of long ago who probably created the stone-throwing catapult and the giant crossbow, EDs are today's creators of the Aegis combat and missile systems, surface and submarine sonars, propulsion systems and other so-

phisticated equipment. Some EDs are ship engineering specialists, managing shipyards. Some are technical managers engaged in research. Others procure new ships and systems for the fleet.

According to Captain H. Pack Willimon Jr., commanding officer of the ED school, "The stated mission of the school is 'to improve the professional proficiency of EDs through training in practical, non-theoretical aspects of their profession as related to engineering, and industrial man-

*Right: Capt. H.P. Willimon Jr., the school's CO; Below: The school's staff assembles for a conference, (l-r): J. Lee, M. Ardales, E. Sutton, Lt.Cmdr. W. Nitsche, Capt. Willimon, Cmdr. K. Frick, Lt.Cmdr. J. Thompson and YN1 M. Vernon.*







*Students Lt. J. Fitzgerald and Ensign M. Morgan with one of their shipyard instructors.*

agement aspects of the ship life cycle.' The ultimate goal of that effort is to provide ships and systems which can be operated reliably and safely to conduct prompt and sustained operations at sea in support of national objectives.

"These words are not mine; you've heard them from the Secretary of the Navy and you'll hear them from Admiral John D. Bulkeley, the president, Navy Board of Inspection and Survey," Willimon added. They are implanted permanently in the minds of all the men and women who, in reality, *are* the Navy.

"The school attempts to provide an overview and insight to enable them to achieve their goal. We don't try to teach what is right or wrong; we teach which decisions must be made and the considerations involved."

The factors considered in making decisions are many, and an amazing amount of material is covered in the six-week basic course. Topics run from the physics and metallurgy of welding to the planning,

programming and budgeting system of the federal government. Also covered are research and development, acquisition, ship design, combat systems, contracts and contracting, naval supply, ship maintenance and modernization, Naval Sea Systems Command and its field activities, Naval Electronics Systems Command and its field activities, civilian personnel management, and diving and salvage.

According to Lieutenant Commander Wayne Nitsche, basic course director and assistant for combat systems, there are two significant strengths in the basic course. "The first is the wide spectrum of material covered. Regardless of which area of 'the business' an ED is working in, he or she must understand the entire mechanism to get things done and to make good decisions. The data rate at the school is extremely high, but we find that our students have huge appetites.

"The second strength lies in the method of delivery. We introduce the skeleton and mechanics of a subject area. Then an ED

officer or other leader responsible for that area follows up with more detailed training. This accomplishes two important things: first, the meat supplied to the skeleton is current and practical; and second, the students become confident that our leadership is deeply involved in their training."

And they *are* deeply involved. A typical six-week basic course will include sessions with three or four flag officers and numerous other leaders, such as major program managers, activity commanders and major command division heads.

Most of the senior ED leaders can find their way to Mare Island, building H-72 in their sleep. Faced with busy schedules and hard, long hours, they enthusiastically pack up and head for the school when they are needed. Then they turn right around and get back to their jobs.

Commodore Myron V. Ricketts, Deputy Commander for Ship Design and Engineering of NavSea, points out that the guest speakers also gain personally from their visits. During a recent trip to the school for a classroom session and as a graduation speaker, he said, "I enjoy the school visits and the talks I have with the troops in the trenches. It brings me back to earth and, more importantly, it pumps me back up.

"You need to recognize that enthusiasm and spirit work in two directions. I, along with most other senior officers, need the contagious enthusiasm of the younger set."

The sharing of enthusiasm and professionalism is one of the objectives of the school's midcareer course. Soon after an ED is selected for commander, the individual is invited back to the school for two weeks to exchange information on what is going on in the community, to be updated technically and to be briefed on current program issues. This is provided by the school staff, guest lecturers and the students themselves. At this time in their careers, they are deeply involved in the business of technical administration and life cycle management.

According to Commander Ken Frick, executive officer and midcareer course director, "The midcareer course is unique



# School

to the engineering duty community. The course is designed to update newly selected ED commanders on recent developments and programs affecting naval systems and the ED community.

"The course affords all ED commanders an opportunity to remove themselves from the day-to-day challenges of demanding jobs. Here, they can spend two weeks increasing their professional knowledge of the entire spectrum of the ED's business and prepare themselves for expanded responsibilities of future assignments.

"Feedback from former course attendees," Frick added, "consistently singles out the one-on-one career counseling which every student receives from an ED flag officer as a significant professionally rewarding aspect of the course."

As with the basic course, the support that the midcareer course receives from the senior members of the ED community is without precedent. During a typical two-week midcareer course, at least five ED flag officers will be in attendance as guest lecturers and to provide career counseling.

In addition to the basic and midcareer courses, the school sometimes holds specialized senior management courses for supervisors of shipbuilding or for naval shipyard managers.

The ED school also assists in administering the Engineering Duty Qualification Program. EDs are not considered fully

qualified until they have completed the school's basic course, attained a minimum of a master's in a technical area, such as engineering or physics, and completed the rigorous qualification program during their first ED tour.

This qualification program consists of developing technical expertise in certain assigned areas, gaining an intimate familiarity with the workings of their own command, and demonstrating a detailed knowledge of all aspects of the ED business, such as that first presented to them in the basic course.

Lieutenant Commander Jerry Thompson, assistant for electronic systems, administers EDQP. He said, "The completion of EDQP is a significant career milestone shared by all ED officers. The program is a common experience which instills pride and professionalism within the ED community.

"After completing the basic course, candidates are given up to two years to complete their qualification requirements and then must pass a rigorous, comprehensive oral examination administered by a board of experienced senior officers and civilians."

According to Thompson, several recent candidates have completed their qualification program within a year. This illustrates the enthusiasm and "can do" spirit which is becoming more and more prevalent in our younger EDs, he said.

The ED school was established by Vice Admiral R.C. Gooding, Commander, Naval Sea Systems Command, in September 1974. Since then 759 officers have graduated from the basic course, and 391 from the midcareer course. This is a healthy percentage of the ED community, which numbers about 1,200, and the impact has been far-reaching. The ED school is under the direction of Chief of Naval Technical Training Rear Admiral R.C. Austin.

Ernest Sutton, director of training and also a plank owner of the school, says, "The success of the school has been phenomenal. Since the completion of the first class in the fall of 1974, it has enjoyed high marks from both of its sponsors and its students. I believe credit for this success rests largely with the engineering duty officer community itself. From the beginning, the school had enjoyed complete support from the total ED community. The assigned military instructing staff has always come from the cream of the EDs. The fact that the first officer in charge of the school, Commander Mal MacKinnon, has now been selected for commodore bears proof of the quality of the personnel sent here as faculty.

"The guest lecturers have been as outstanding," Sutton continued, "each class is supported by a guest faculty mostly comprised of the ED technical professionals who are actually in the billets for which the students are trained.

"When you join the staff and guest faculty with the vigorous, competent students being accepted into the ED community today, success is a natural result."

Accession to the ranks of the ED community can be made either directly from a college or university at the ensign level, or by a transfer from the unrestricted line. Accession standards are fairly stringent, and waivers are considered only for proven performers. For additional information, write or call the office of ED Plans and Policies, Naval Sea Systems Command (SEA 00Z), Washington, D.C. 20362, Autovon 222-8503 or commercial (202) 692-8503.



*Director of Training E.L. Sutton Jr. working with students of Basic Course 2-83B.*



# Acadia Helps Children

Story by K.L. Chandler  
Photos by D.J. Wilkins,  
USS Acadia (AD 42)



The children in two African cities benefited by the good will of more than 100 volunteers from USS *Acadia* (AD 42) during port visits in April.

In Mogadishu, Somalia, *Acadia* sailors befriended orphan children for two days while making repairs to the Families of Children Orphanage. The Canadian-sponsored orphanage struggles to survive on private donations.

After being contacted by U.S. Information Service Representative Terry Eakin in Mogadishu, *Acadia's* chaplain, Lieutenant Jack Hartman, contacted the director of the orphanage and toured their quarters. Planning teams from *Acadia's* repair

department then surveyed the situation and developed a plan of operation.

Crew members from each division became involved in the project. The supply department donated paint, cleaning gear and other items necessary to repair playground equipment, shore-up structural flaws in the buildings, and accomplish other general repairs. The medical and dental departments examined children and donated supplies for future use.

The crew raised almost \$700, enabling one girl to travel to Kenya for eye surgery. She received nursing care for three days on board *Acadia* before traveling to Kenya. An additional \$669 was donated to the

orphanage for future work.

In Mombasa, Kenya, *Acadia* sailors and African students worked together to build a track field for the Mombasa Baptist High School. Before pulling into port, *Acadia* was contacted by the American consul, Robert Gribben, and asked to help with the project. *Acadia's* draftsmen went to work designing the track and drawing up the blueprints.

Designing the track without having seen the site created a minor problem. The Kenyan government protects mango trees, and several large mango trees grew in the path of the track. To avoid destroying any of the trees, the original plans were altered making the track more egg-shaped than round.

The first day of the two-day project involved marking the perimeters of the track with stakes. The following day, colored cement blocks were set in the ground every 5 meters. The track will be used not only for high school meets but also for other events such as local Special Olympics.



At Mombasa Baptist High School in Mombasa, Kenya, Lt. Jack L. Hartman and PN2 Peter P. Garm Jr. (l-r above) break ground for a 440-meter running track which Acadia crew members designed and then built. A week later, Acadia crew members (left) paint a dormitory and build bookshelves and porch stairs at the Families of Children Orphanage in Mogadishu, Somalia.



# Cash for Your Ideas

## Their

Storekeeper Second Class Michael P. Schaefer's new method for servicing the nickle-cadmium battery system in the AN/PRC-94 (A) portable radio saved the Navy \$200 annually. More savings are expected because of the radio's widespread use.

...

Lieutenant Commander Boyd C. Fowler's suggestion for fixing damaged blades in case and vane assemblies on the TF-41 aircraft is expected to save the Navy nearly \$4 million. He suggested swapping good parts among otherwise damaged assemblies at the intermediate maintenance level. Fowler, power plant officer at Cubi Point Naval Air Station, Republic of the Philippines, was awarded \$2,500.

...

Converting the BRA-9 radar mast on *Skate*-class submarines for use with the BRA-34 system required cutting access into the mast. This frequently led to replacing three cables, at \$15,800 each, which were usually damaged in the process. Electronics Technician First Class Lawrence D. Bloom, of the Naval Submarine Base, Pearl Harbor's Repair Department, installed ports in the faired mast for easy access to clamps and connectors needed for the conversion. He saved the Navy more than \$47,000 and earned himself \$1,040.

A diesel blower boring tool designed by Machinery Repairman First Class Eleaser D. Tolentino is expected to save the Navy nearly \$600,000 and reduce unnecessary cuts into submarine hulls and perhaps surface vessel hulls as well. Boring a blower required putting a submarine in dry dock, cutting into the hull, removing the blower, sending it to a factory and waiting about a year for its return. Tolentino, who also works at the Pearl Harbor Submarine Base, made what award administrators called "an invaluable and inexpensive tool" that bores the blower in about three weeks aboard ship without dry docking or hull cuts. He was awarded \$4,200.

...

Senior Chief Electronics Technician Lionel C. Mhyre and Aviation Electronics Technician First Class William B. Scruggs, both at Whidbey Island Naval Air Station, Wash., saved the Navy nearly \$21,000 and shared a \$1,000 award for modifying the AN/AWM-54 test set function switch to





Got an idea that could save money for the Navy? Know how to do a job easier and faster? Think you can figure out a way to modernize an old process?

Go to it. Write down your suggestion and get in on the Navy's cash awards program. Your idea can mean money in your pocket.

Last year, Navy military and civilian people saved the government nearly \$123 million and earned nearly \$16 million in awards. Civilians earned more than \$15

## Ideas Are at Work

turn off stray voltage instantly. This prevents a fast-acting fuse from blowing, even when full-firing circuit voltage is applied.

...

Lieutenant Bruce L. Chase saved the Navy nearly \$26,000 and earned himself \$2,150 by automating quality assurance documentation at the Naval Submarine Support Facility, New London, Conn.

...

Leon R. Howard, a mechanical engineering technician, and Master Chief Engineman Arthur F. Taylor, both at Naval Sea Support Center, Atlantic Detachment, Portsmouth, Va., saved the government more than \$600,000. Overrunning clutches on *Newport*-class LST engine turbochargers sometimes fail, and repair parties used to take about 96 hours to cut a hole in the deck, remove the broken turbocharger, replace it and repair the deck. It also took four to six months for the faulty unit to be sent to the factory, be repaired and returned for further use. Taylor and Howard discovered that only 12 rollers in the overrunning clutch required replacement in such cases and showed how it could be done in place by just two people working 24 hours. And the deck didn't have to be cut. Net effect was to triple the life of the turbochargers. The men shared a \$2,105 award.

...

Jimmie Bennett, attached to the Supervisor of Shipbuilding, Conversion and Repair at Jacksonville, Fla., proposed alterations to the AN/SLQ-32 antenna platform on FF 1052-class ships. This improved integration of the platform legs to the ship structure and reduced the amount of structural changes to the ship's deck house. He received \$1,700 based on tangible benefits of \$600,000.

...

Martin Cohen, Naval Ship Systems Engineering Station, Philadelphia, Pa., received \$1,785 for suggesting the use of less expensive lenses in boiler inspection devices.

...

Arch Carey and John R. Smith, civilian employees at the Marine Corps Logistics Base, Barstow, Calif., saved the government more than \$298,000 with their suggestion to clean continental 1790 diesel engine cylinder lugs and rocker

arm assemblies by vapor honing rather than by hand. They shared an award of \$4,692.

...

Donald J. Altobelli, a civilian at the Naval Air Propulsion Center, Trenton, N.J., received a \$1,500 Special Act Award for overcoming a problem with the spiral bevel gear in the main transmission of the UH-1N helicopter. "Changes initiated as a result may save lives, will save considerable repair costs and improve the operational safety of all squadrons operating UH-1N and AH-1J helicopters," according to official reports.

...

Frederick Reinisch Jr., an electronics mechanic at Long Beach (Calif.) Naval Shipyard, was awarded \$2,830 for making a device to straighten rotary couplers on SPS-10 surface search radar when they get out of alignment instead of replacing them. The new method is expected to save \$70,000 the first year.

...

John Kushner, a production controller at the Naval Air Engineering Center, Lakehurst, N.J., saved the Navy \$55,000 by having a primary flight control station mock-up moved from his facility to the neighboring Naval Air Technical Training Center for training. It could have cost up to \$270,000 to build a new station at the training center. Kushner received \$2,350 for his suggestion.

...

Christopher Conrad, a quality assurance specialist at Naval Air Rework Facility, Norfolk, Va., found a safe way to blend and reuse previously rejected beryllium brake parts for the F-14 aircraft. His method saved the Navy more than \$4 million the first year. Conrad received \$5,225 for his idea.

...

The people whose money-saving accomplishments are listed above are only a few examples of all those Navy military and civilian people who took the time to work out solutions to problems and make written suggestions. You can do the same. Next year, you can add your name to the growing list of those who are saving money for the Navy and earning extra money for their efforts.



million with 17 receiving \$1,500 or more. Uniformed Navy people and Marines suggested tangible benefits worth more than \$10 million in savings and earned themselves some \$213,000 in the process. Eleven of those military people were singled out for special recognition in addition to their cash awards.

But much more can be done and the Navy wants you to get your share. Last year, only 1,086 Navy military people—about two sailors in every 10,000—submitted ideas. But the Navy knows there are many more people out there with ideas rolling around in their heads.

Ideas can be in the form of inventions, suggestions or scientific achievements. They should propose ways of doing things

better, faster, cheaper or safer. They could be ways to improve services to the fleet; increase productivity; conserve energy, manpower, materials, time or space; increase health and safety; improve product quality; or reduce costs without loss of quality or efficiency.

Individuals or groups may submit suggestions, but to earn money, your suggestions must be specific, with workable solutions that are beyond your normal job duties.

Your suggestions don't have to be adopted Navywide to earn money; commanding officers have the authority to award up to \$2,500 for ideas that benefit their commands.

Also, an article published in a scientific

or technical journal, newspaper, periodical or other publication can earn an award. For example, Machinist's Mate Second Class William Jefferson and Machinist's Mate Fireman Michael Lucero recommended a modification to anodes used in electroplating—a convenience that could be used optionally in the fleet. Although the proposal wasn't adopted Navywide, it was published in *Deckplate*. Jefferson and Lucero shared a \$50 award.

Civilian and military awards are made under different programs, but the main purpose of both is to help the Navy—the government—save money. At the same time, you can earn as much as \$25,000 for your ideas.

It's easy to submit a suggestion: simply

## Performance Counts

Earning a highly satisfactory or outstanding performance evaluation can mean money in the bank for Navy civilians under the Navy's recently revised Incentive Awards Program.

The civilian program has been streamlined, its paperwork requirements and the processing time has been reduced. Also, award-giving authority has been extended to lower command levels. Time-consuming, costly awards committees are strongly discouraged.

Major revisions were made in July 1982 when Civilian Personnel Instruction 451 went into effect to supplement the "Federal Personnel Manual's" Chapter 451. The new instruction included changes required by the Civil Service Reform Act of 1978. Two OpNavNotes, 15 instructions, two reports, five forms and three messages were cancelled as a result.

Considerable responsibility for Incentive Awards Programs has been delegated to Echelon I and II commands. Activities can tailor established awards to local requirements and create new ones recognizing productivity, length of service, publications, community service and

accomplishments in equal employment opportunity, and occupational safety and health.

Bob Alexander, the Navy's Incentive Awards Program administrator, Civilian Personnel Policy Division, Office of the Chief of Naval Operations, said the revised instruction "substantially alters the program's philosophy and content. It frees management from unnecessary regulatory constraints and paperwork. Activities have an unprecedented opportunity to increase the effectiveness of their Incentive Awards Program. The instruction provides the framework for activities to develop their own incentive awards plan, and shape a program responsive to local needs. The revised program should provide maximum flexibility to motivate improved employee performance and productivity."

The instruction recommends improving award programs by delegating authority to make cash awards to line managers. It calls for minimizing review levels in the award approval process, setting time limits for processing awards and eliminating activity incentive awards committees.

"Slow processing plagued the program

and generated complaints and frustration," Alexander explained. "Processing time should be reduced if activities follow the new recommendations."

Another change ties recognition to current performance evaluations, virtually eliminating those long-winded award write-ups. Written justifications no longer are required for Quality Salary Increase and Sustained Superior Performance awards. These are requested within 60 days of the employee's performance rating, provided the summary rating is highly satisfactory or outstanding.

Award requests submitted 60 days after an evaluation or for employees whose summary rating is below those levels still require written justification. Award recommendations, however, can be made at any time.

The minimum performance period for a quality salary increase has been changed from three months to six months and larger cash amounts—up to 15 percent of an employee's salary—have been approved for Sustained Superior Performance awards. Civil service employees in the merit pay system are eligible either for a Sustained



put it in writing. Include drawings, schematics or statistics as needed to support your idea. Suggestion forms are available at most commands and through the Navy supply system, or a suggestion can be submitted in the form of a letter. Specific information about the Military Cash Awards Program—better known as MIL-CAP—is contained in OPNAVINST 1650.8A.

So, if you do have a good idea, don't sit back and wait for someone else to solve the problems you see on the job. The Navy needs your ideas now. And when your suggestion is adopted and you have a check in hand, you'll be glad you made the effort. So will the Navy.

—By Kenneth J. Rabben  
and JO2 William Berry

Superior Performance or a Merit Pay Performance Award.

A merit pay employee can get a Merit Pay Performance Award or an amount that does not exceed a full Sustained Superior Performance Award during the rating year—July 1 through June 30.

Activities also have greater latitude in the amount of cash they can award. "There are no minimums, only established ceilings. It is up to activities to determine a reasonable and appropriate awards scale," Alexander said.

"Activity heads also can establish new honorary awards, such as engineer of the quarter, and recommend new types of cash awards for approval by the activity's headquarters," he added.

Alexander also pointed out that activities are no longer required to provide length of service awards every five years, beginning with completion of 10 years' federal service. The revised instruction requires length of service awards only every 10 years.

—KJR



**New surface for flight decks.** Dr. Robert Brady of the Naval Research Laboratory, Washington, D.C., examines the impact resistance of a test plate of a new surface coating for aircraft carrier flight decks. Present-day, non-skid coatings on carriers must be resurfaced at least twice a year at an annual cost of about \$3 million. NRL tests so far have demonstrated that new non-skid surface formulas do not deteriorate as easily as current carrier surface coatings. Thus, they will eliminate jet engine foreign object damage aboard aircraft carriers and its high repair costs. *Photo by Dan Boyd, NRL.*



## All in a Day's Work

Story by JOC Glenna Houston

Photos by PH1 Carolyn Harris, PAC, Norfolk, VA.

When a Navy search and rescue unit went to the aid of a capsized ship off the Virginia coast, the team was just doing what they get paid to do.

One member, Petty Officer Second Class James D. McCann II, earned the Navy and Marine Corps Medal for his efforts in rescuing crewmen from the collier *Marine*

*Electric* on Feb. 12, 1983. McCann, however, wasn't the only one of NAS Oceana's five-member SAR unit to face danger.

All team members' lives are on the line when the Virginia Beach-based team flies to the rescue of a downed aircraft or a ship in trouble.

Their H-3 *Sea King* SAR helicopter reached the area of the *Marine Electric* tragedy—about 30 miles off the coast—at 6 a.m. The team expected to find crewmen in life boats, but the scene was harshly different.

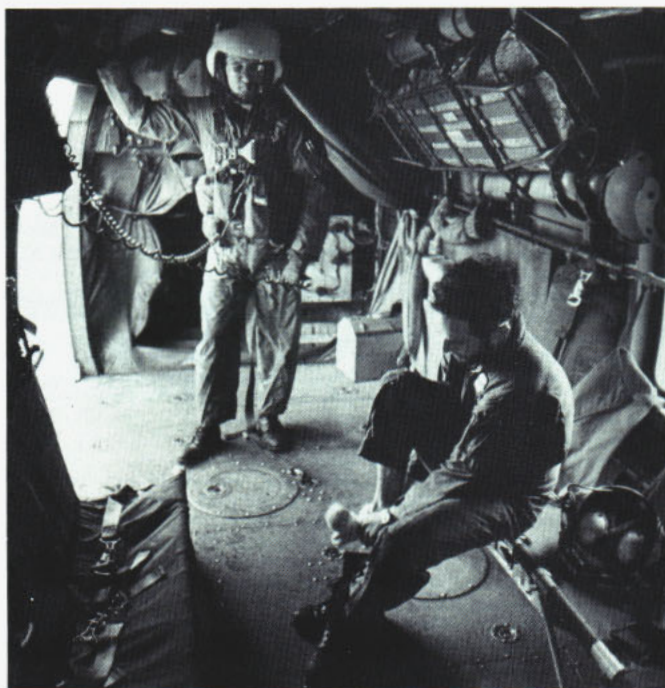
"When we made our approach, all we could see were blinking lights that turned out to be reflective tape on life vests," McCann said. "It looked like salt or sugar sprinkled on black paper."

A Coast Guard helicopter already on the scene had no rescue swimmer, so McCann, wearing a wet suit, was lowered into the 37-degree Fahrenheit water with 20-foot swells:

"It was like my lungs stopped working when I first went in. It was easy to exhale, but terribly hard to inhale."

"I couldn't see anything because the swells were so high. The Coast Guard helicopter would pick me up and lower me as close to a victim as they could; then I'd drag him over to the rescue basket. The basket was underwater most of the time, and I had to hold the person's jacket with one hand and the top of the basket with the other to keep them together until the basket was hoisted by the helicopter."

Meanwhile, the Navy crew searched for signs of life from other people in the water.



Upper left: SAR mission commander Lt. Cmdr. William Sontag. Left: AMS2 James McCann II gets ready to go out on the helicopter's hoist.





Petty Officer Second Class Stephen L. Scarborough, the crew chief, helped direct the pilot so the rescue sling could be lowered into the water in hopes someone would grab it. No one did.

The *Marine Electric* crewmen had been in the water more than two hours when the Navy team arrived. The maximum survival time in 37-degree water without insulated gear is two hours and 15 minutes.



"It was an experience I'll never forget," said Hospital Corpsman First Class Welby D. Jackson. "I can deal with heart attack victims, broken bones or other injuries, but seeing all those people floating in the water was hard to handle. I wanted to go into the water so badly, but it would have been dumb. There was really nothing I could do."

Three men from *Marine Electric* were saved and 24 bodies were recovered. Seven were missing and presumed drowned.

Near the end of his efforts, McCann feared for his life when a merchant ship aiding in the rescue passed too close. He thought the undertow from the ship's screws would pull him down. The helo couldn't get close enough at first to pull him out without getting into danger itself. Finally, he was able to swim far enough from the ship for the helicopter to pick him up.

McCann was later treated for hypothermia.

"I just wish there was some way we

could have been there sooner," McCann said.

"It was difficult for me, too," said Navy pilot Lieutenant Junior Grade Kevin Lynch. "I wish that there had been something more we could have done."

McCann received his medal on Feb. 18 for "courageous and prompt actions in the face of great personal risk" from Vice Admiral Thomas J. Kilcline, commander of the Naval Air Force, U.S. Atlantic Fleet. McCann's shipmates, including Lieutenant Commander William Sontag, the aircraft commander, received letters of commendation.

"We've never been called into a situation where we had to launch cold," Sontag said. "You hear a lot about readiness. I'm glad to know we could do it when it was needed."

*For his "courageous and prompt actions in the face of great personal risk," SAR swimmer McCann (shown at left being lowered into the water and below center at attention) was awarded the Navy and Marine Corps Medal.*





# SAILING

## Not 'Just for the Fun of It'

Some think of sailing as fun. Others think of it as a sport. The Naval Academy at Annapolis, Md., however, goes further by making sailing a requirement of plebe summer.

By the end of their first week of training, huffing and puffing, and acquiring a new vocabulary consisting of "Yes, ma'am" and "No, sir," all 1,350 members of the class of 1987 had also tasted the thrill of skimming the water.

"As far as sailing goes, you learn quickly," Plebe Thomas Maxfield said. "They put you in a situation where you have to do it, and so you do."

Under the Division of Professional Development, 60 newly commissioned academy graduates ran the summer sailing program. (The officers involved reported to flight training or other schools later in the fall.)

At first, small groups of plebes ventured out in the 24-foot knockabouts; others formed larger groups and sailed the 40-foot yawls. By the end of the summer, plebes became eligible to take boats out by themselves for the remainder of their time at the academy, provided they passed a test.

"I think it's important that everyone learns sailing," Plebe Scott McFarlane said, "because this is the Navy and most of us will be spending time on the water at some point in our careers. We should become oriented."

"As far as wind, weather and tide, sailing is a fundamental way to learn about the water," Maxfield said. "In a ship you have additional help from an engine; in sailing you have to go with what you have.

It's good to know the fundamentals."

During the school year, sports are engaged in every day from 3 until 6 p.m. All midshipmen are required to participate in athletics on either the intramural, junior varsity or varsity level. This year, about 150 plebes chose sailing as their main sport.

Experience is not a requirement, and the team is comprised of both men and women. Throughout the first year on the junior varsity team, plebes learn good seamanship and racing skills. About 40-50 plebes concentrate on the smaller dinghy teams, and the rest work as crew members of oceangoing yawls.

"One of the misconceptions of sailing," McFarlane said, "is that it is purely recreational. When you get out there on the water, it can be one of the most strenuous sports in the academy's athletic program. You have to be in good physical shape. If you're on a one-man boat, it's non-stop work."

The sailing season runs until Thanksgiving and resumes in the spring when the ice disappears from Chesapeake Bay. The academy competes against other college teams up and down the East Coast.

"As the seasons change, the rigors of sailing change," Plebe Michael Cantwell said. "They're out on the bay in February, and that's when it gets tough endurance-wise." Cantwell has been sailing for years and even taught sailing before coming to the academy.

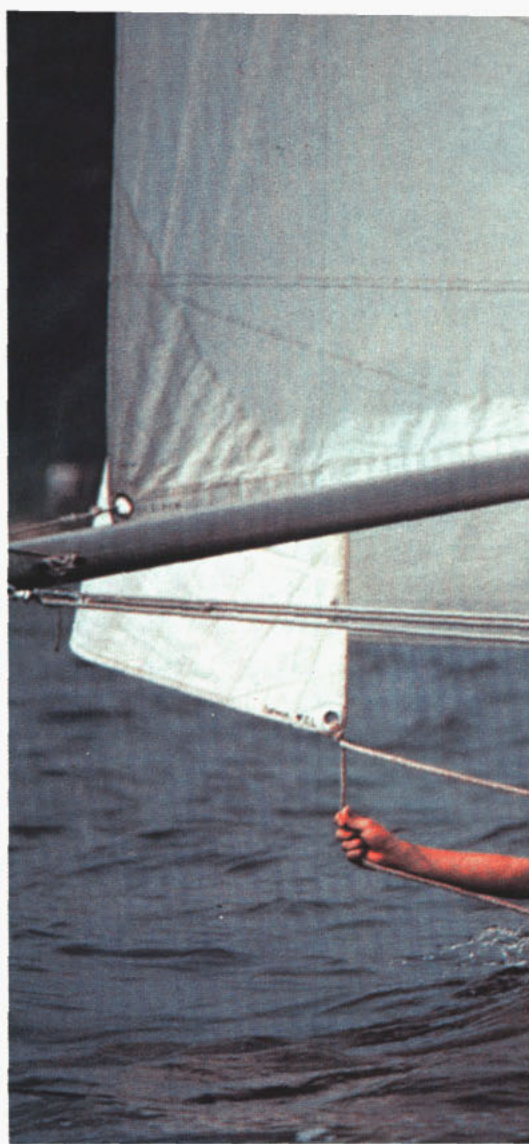
"Because I have taught sailing, I think you can learn a lot about people by watching how they react under stressful situations," Cantwell said. "When you're on

the water, it can be a 1-knot breeze or gusting at 40 knots—there are many other variables. You can't simulate that anywhere else—in any other sport or in a classroom."

Even the academy catalog spells out the importance of sailing: "Perhaps you have never thought much about the sea; perhaps you have lived near and known it well all your life; perhaps you have never known much about it but it has always spelled adventure, travel, and excitement for you. Whatever your situation, you should not think seriously about Annapolis without also thinking about the sea. The Naval Academy is linked with the sea through its history, its mission, its day-to-day work, and its future."

Since 1957, the climax to the summer sailing program has been the competition for the Blakely Cup. This year, each summer division selected its three best sailors to compete in the three-race event.

Maxfield, McFarlane and Cantwell—all







experienced sailors—knew they wanted to go out for the sailing team upon entering the academy. They were chosen for the Blakely Cup race and learned that the first one over the finish line isn't necessarily the winner. Fair play is just as important as keen sailing. For instance, one boat that failed to yield the right of way to another was dropped from first place to last for that race.

Fairly calm winds prevailed on the afternoon of the Blakely Cup, frustrating the efforts of some sailors. "The really good sailors are the ones who can win in light wind," Cantwell said. "Sailing is an intelligent sport, you have to use good strategy."

"And you need a little luck," Maxfield added.

—Story by PH2 Liz Schading  
—Photos by PH2 Perry Thorsvik



Top: A competitor hangs over the side trying to keep his sail filled with air. Left: Preparing to hoist the sails. Above: Teamwork is the key word to sailing. Photo by PH2 Sharon K. Nelms-Thorsvik.









*U.S. Naval Academy plebes compete in Annapolis during the Rear Admiral Blakely Cup Race. The three-person teams represent the best sailors of each summer division at the academy.*





# Bearings

## Navy Wings in Space

Astronaut (Navy captain) Robert Crippen (right) presents the gold aviator wings of Ensign Cary Jones to her parents, Dave and Sally Jones. Crippen took the wings with him into space on board the shuttle *Challenger*. Jones was the first female Navy pilot killed in the line of duty when her plane crashed during a training flight in Texas last July. She had hoped to be an astronaut. The presentation was made recently in the office of Rear Admiral John B. Mooney Jr., director of oceanography, at the Naval Observatory in Washington, D.C. Admiral Mooney graduated from the Naval Academy with Dave Jones in 1953.

*Photo by PH2 Perry E. Thorsvik*



**Vice President George Bush** receives an honorary diploma from the Inter-American Defense College from Rear Admiral Sayre A. Swarztrauber, director of the school. The vice president was guest speaker for the college's most recent commencement at the Organization of American States in the Pan-American Building in Washington, D.C. Some 60 senior officers from Central and South American countries study at the college annually, along with three to five senior U.S. military officers. The course emphasizes economic and political influences, centering on how countries interact.

*Photo by PH2 Diane K. Wolford.*

## Schmidt Named 1982's Top AC

Air Traffic Controller First Class Richard M. Schmidt was awarded the Vice Admiral Robert B. Pirie Award as the top Navy Air Traffic Controller for 1982 in recent ceremonies at Naval Air Station Kingsville, Texas.

His citation, signed by the Secretary of the Navy, read in part, "Petty Officer Schmidt provided the leadership and professional stability so vitally necessary at the Navy's busiest radar approach control facility. A threefold increase in the geographic area of responsibility, which was delegated to the Kingsville Approach Control as the result of the nationwide FAA controller strike, provided Schmidt the opportunity to assist in designing new procedures within the airspace area acquired."

Schmidt is credited with coordinating the search and rescue efforts for four separate plane crashes. On an average day, the Kingsville facility conducts between 900 and 1,000 naval aircraft operations, and 500 private or commercial planes being radar controlled in the terminal area.

*—By Ensign Sheila Bilyeu*



## MSC Signs \$250 Million Tanker Agreement

A \$250 million agreement between the Navy's Military Sealift Command and Ocean Carriers Inc. of Houston, Texas, to charter five diesel-powered T-5 tankers was signed June 30.

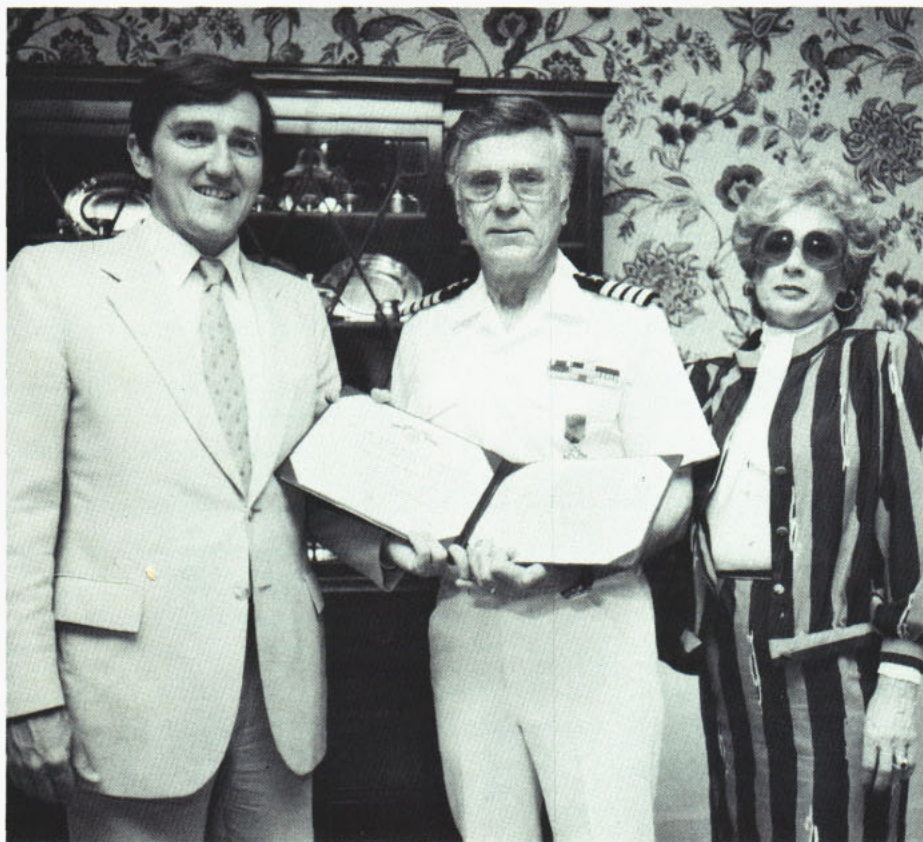
The five new 30,000-deadweight-ton clean product, ice-strengthened ships will

replace 25-year-old T-5 tankers currently owned by MSC and contract operated. Each ship will be chartered for five years with three additional five-year options.

The tankers will be built in Tampa, Fla. The first two will be delivered to MSC in January and April 1985, two more in 1985

and the last one early in 1986.

The new tankers will offer greatly increased fuel efficiency due to slow-speed diesel engines, decreased crew size due to automation and approximately 12 percent greater cargo capacity. After delivery of the new ships, the older T-5s will be placed into reserve status.



**Hollywood celebrity receives Legion of Merit.** Retired Naval Reserve Captain Jackie Cooper, better known as an actor, director and producer, was recently awarded the Legion of Merit in ceremonies at the Pentagon in Washington, D.C. Secretary of the Navy John F. Lehman Jr. presented the award in recognition of Cooper's outstanding contributions to the Navy during his reserve career. Cooper's wife, Barbara, was present during the ceremony. Over the past two decades, Cooper's experience in the entertainment business has proved invaluable to the Navy. In one year alone, he represented the Navy as guest celebrity at the 25th anniversary of USS *Hancock* (CV 19), chaired a committee soliciting celebrity support for Navy recruiting, made television appearances for Armed Forces Day and the Indianapolis 500 autorace, acted as master of ceremonies at a Christmas party for underprivileged children, arranged for celebrity Christmas greetings to the fleet and helped set up a recruiters' night at Disneyland. He also narrated numerous Navy films, special broadcasts and other audio-visual presentations. Cooper served as a reserve public affairs officer with the Navy Office of Information in Los Angeles from 1962 until his retirement last year.



**Keeping it in the family.** Most families pass things from one generation to another but hardly ever do they pass along an emergency feed pump. Lieutenant Commander Allan D. Wall, chief engineer aboard USS *Guadalcanal* (LPH 7), turned in an emergency feed pump from his ship's fireroom which was beyond economic repair and ordered a replacement. When the replacement pump arrived from the contractor, it bore an engraved nameplate: "USS Wright (CVL 49) #2 Fireroom." It turns out that in 1949, the year Wall was born, his father—Boilerman Technician First Class A.D. Wall—was the supervisor of Wright's No. 2 Fireroom charged with maintaining the pump. Now, as fate would have it, BTI Wall's son has the opportunity to do the same. The elder Wall went on to complete 25 years of service and retired as a lieutenant.

—Story by JO2 A.H. Sexton  
—Photo by PHAN J. Miranda



# Bearings

## Ex-Navyman Named U.S. Ambassador to Sierra Leone

A retired Navy senior chief quartermaster and career foreign service information officer with the United States Information Agency, Arthur W. Lewis, has been named ambassador to Sierra Leone.



Arthur W. Lewis, U.S. Ambassador to Sierra Leone.

Lewis—until recently—was USIA's director for African affairs, a position he has held since September 1979. Before that, he served as public affairs officer in Lagos, Nigeria.

The retired chief petty officer began his career with USIA in 1968 with the training personnel division where he was responsible for the foreign affairs intern program. In 1970, after a year of Romanian language training, he was assigned to Bucharest as cultural affairs officer. Later he was posted to Lusaka, Zambia, and in 1974 he served in Addis Ababa, Ethiopia.

Born in New York City in 1926, Lewis entered the Navy in 1943 and served overseas until 1946. Before being recalled to active duty in 1950, he studied at the New York State Institute of Applied Arts and Sciences. After retiring in 1967, he studied at Dartmouth College where he received a master's degree.



Guests at USS *Harold J. Ellison* (DD 864) 38th birthday celebration help themselves to chow during an open house held recently in Philadelphia. Past and present crew members and their families gathered at the Philadelphia Naval Base to pay tribute to *Ellison* which was decommissioned shortly after the birthday event. The destroyer was replaced in the Naval Reserve Force by USS *Patterson* (FF 1061). Photo by PHAN Phil Hemon.

## Navy Chefs Take the Cake



"Sea Captain's Wedding Cake," created by MSC Roger H. Salazar, won a grand prize in the baking division of the culinary arts show.

A team of Navy mess management specialist instructors recently won three first place ribbons, including a grand prize, at a culinary arts show. The show was sponsored by the Chefs de Cuisine Association of San Diego and the Cystic Fibrosis Foundation.

The instructors, from Mess Management Specialist "A" School at San Diego's Naval Training Center-based Service School Command, also won two seconds and three thirds. Every Navy entry received at least an honorable mention in the competition against some of the finest chefs and culinary organizations in California.

"These kinds of results are amazing," said team captain John D. Britto, a retired master chief mess management specialist, "especially when one considers that this type of cooking is not what Navy cooks do for a living. In fact, only two members of the 20-man team had ever competed in a culinary arts show before."

—Story by JO3 True R. Spence  
—Photo by JO1 Al Holston Jr.



## Books for Umingan



The helicopter came in low over the Central Luzon town of Umingan in the Republic of the Philippines. As it touched down in the school yard, more than 1,000 elementary and high school students gathered around the aircraft.

Petty Officer First Class Diomedes Liganor cleared the way for the helicopter crew to unload the cargo of books. Liganor grew up in Umingan and was graduated from Immaculate Conception High School before joining the Navy in 1960. On a recent trip home, he had noticed that much of the school's furniture and materials were the same he had used as a student. And, according to Anita Tolentino, the school's assistant principal, most of the school's books had been ruined by termites and water damage.

Liganor, remembering what he had read about the Navy's Project Handclasp, contacted program coordinators. He then obtained a letter from school authorities asking for books for the schools.

Within a short time, some 4,500 books were donated by private citizens and by military and civilian libraries in the states; they were put aboard a Navy ship heading for the Philippines. But Liganor still had to get them from Cubi Point to Umingan, 75 miles away.

"I tried to do it myself, but it cost too much to get the vehicles to carry the books," he said.

An air station responded to the call for help. Several of Liganor's co-workers at the Cubi Point personnel office also volunteered and traveled to Umingan to help.

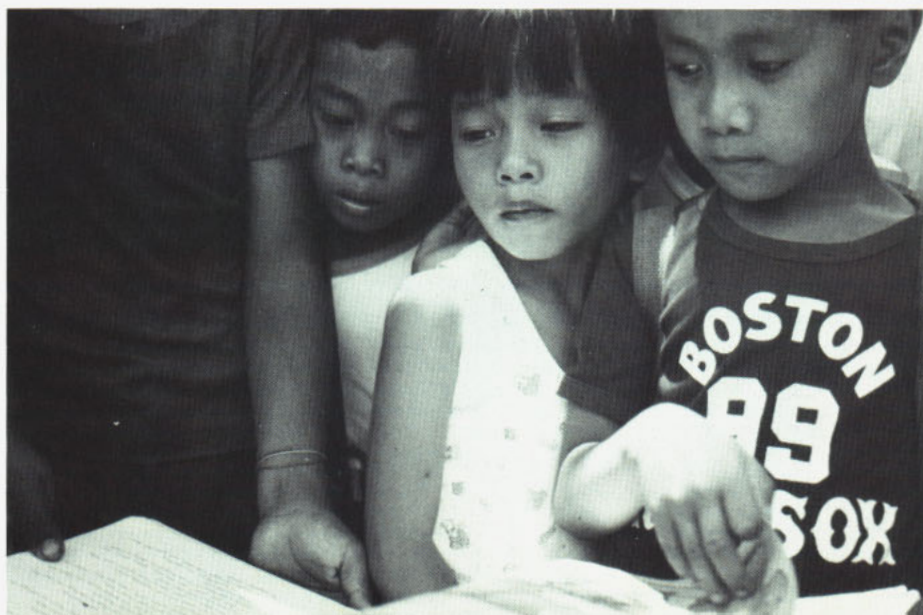
The greeting the Navy people received in Umingan was friendly and warm. After returning with a second load of books, the helicopter crew was treated to lunch in the high school and was given a tour of both schools. They watched the children beam with enthusiasm as they placed their newly



arrived books on library shelves.

"It was an opportunity to serve and provide support," said Lieutenant Commander David Tibbs, pilot of the helicopter. "It was great being part of an overall effort that started back in the states. Getting the books and seeing them put on the shelves brought a great deal of satisfaction."

—Story by PH2 Paul Soutar  
Photos by PH2 Soutar and  
PH3 William Braddock  
PARep Seventh Flt, Subic Bay





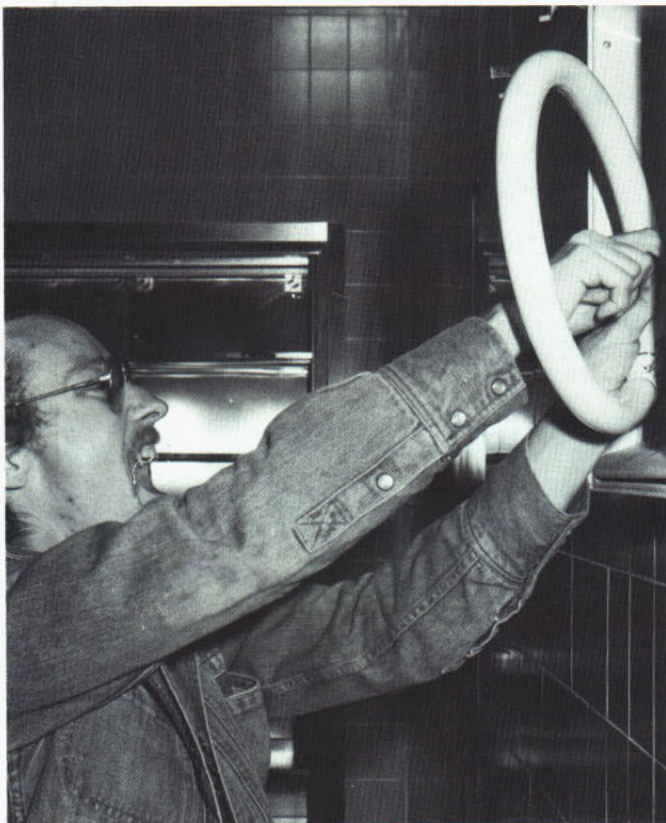
# Who Takes Care



*Painter Richard Thomas*



*Machinist Sam Tanaka*



*Electrician Bryan March*



*Air Conditioning Mechanic Arnaldo Sedayao*



# of the Hospital?

**By Jerry Boling  
PWC Oakland, Calif.**

The "Code 4" loudspeaker announcement shattered the early stillness at the Naval Regional Medical Center's main hospital building at Oakland, Calif. Navy doctors, nurses and medical technicians raced toward the front entrance.

An ambulance sped into view and stopped at the front entrance of the Oak Knoll Naval Hospital. Waiting attendants quickly opened the rear doors of the ambulance; they removed the stretcher-borne patient and hurried inside to a well-prepared emergency medical team.

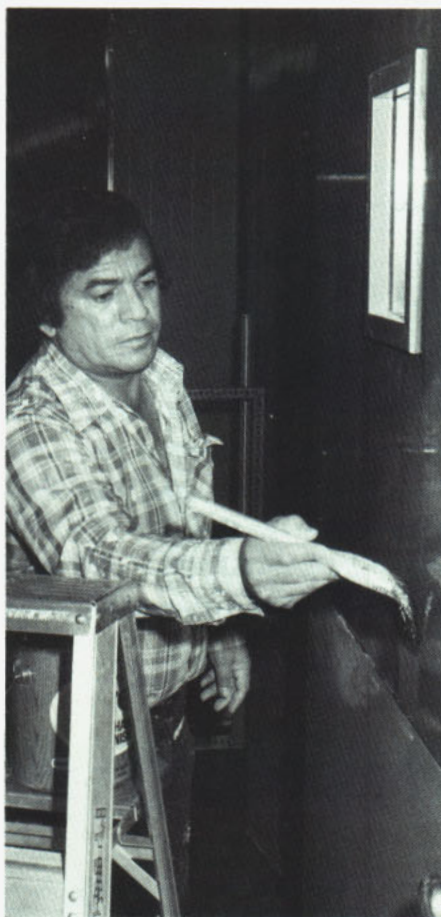
But what of the "unseen emergency team" that makes such a response possible? Just as a hospital takes care of people, someone has to take care of the hospital. Without proper maintenance of hospital equipment and structures, emergency response would be slowed. Without keeping patient care areas up to the "state-of-the-art," medical teams' efforts become difficult.

Public works and maintenance support for the hospital is the responsibility of the Navy Public Works Center at San Francisco Bay. "Because of the hospital's patient care mission, the center is careful to schedule maintenance and repair service on a 'not to interfere' basis," said Maintenance Foreman Buddy Ball.

Ball supervises civilian craftsmen and technicians assigned to the maintenance shop at Oak Knoll. They are some of the more than 1,000 Navy civilian employees working at major bases and activities in the San Francisco Bay area. They're also part of a \$100 million-a-year Navy business.

During hospital maintenance projects, PWC employees and supervisors coordinate required maintenance with the hospital staff civil engineer's office and the departments involved. Getting the work done in this setting can mean PWC employees are sometimes on the job outside normal working hours.

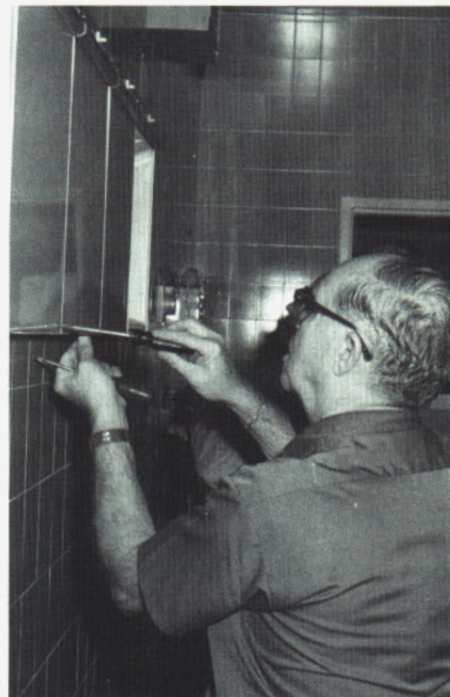
During a recent renovation project at Oak Knoll, work included carpentry, electrical, mechanical, steamfitting and interior painting operations. Special attention for hospital areas included the operating rooms, passageways, patient hold area, nursing and supervisory offices and stations, medical supply and storage spaces, dressing rooms and instrument rooms.



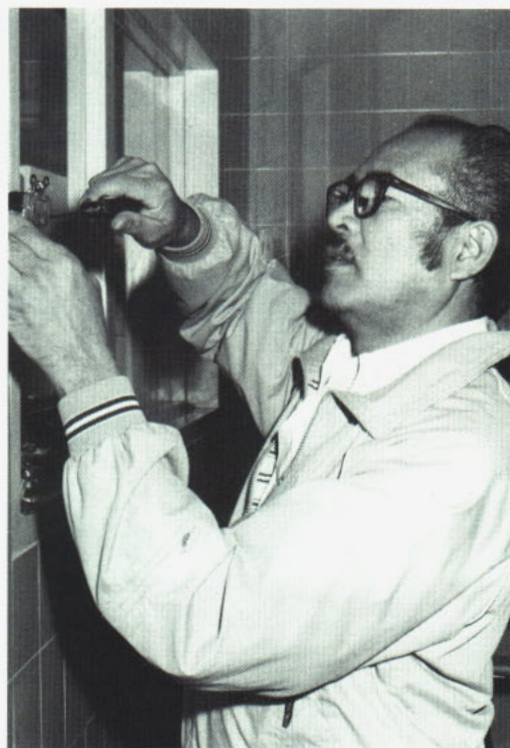
*Painter Anthony Ortiz*

PWC craftsmen installed new equipment, cabinets and shelves, replaced floor and ceiling tile, provided new light fixtures and electrical switches, and worked on heating and air conditioning equipment.

"Team spirit and cooperation are important. The PWC team concept is alive and doing well at the Navy hospital's PWC shop," said Captain C.M. Maskell, PWC commanding officer.



*Electrician Jim Lingenfelter*



*Electrician Fred Oague*









# Our Navy Men in Panama

By JO1 P.M. Callaghan, NIRA Det 206

*Two-thirds of our foreign trade and petroleum pass through the Panama Canal and the Caribbean. In a European crisis, at least half of our supplies for NATO would go through these areas by sea. . . there can be no question that the national security of all the Americas is at stake in Central America. If we cannot defend ourselves there, we cannot expect to prevail elsewhere. . . We have a vital interest, a moral duty, and a solemn responsibility. . . Who among us would wish to bear responsibility for failing to meet our shared obligation?*

—President Ronald Reagan  
April 27, 1983

“Hey, we need some more M-16 ammo over here!”

The voice is muffled in the pre-dawn darkness—the scene is Panama. The voice is almost lost in the noise created by hurrying figures who carry equipment to waiting patrol boats at pier side: water, rations, rifles, ammunition, spare parts. Two sailors heft a .50 caliber machine gun and carry it toward the boats; the narrow ladder leading down to them sags beneath the weight.

These rushing figures are backlit by a single floodlight shining over the door of Combat Harbor Patrol Division at the Naval Station Rodman. Dressed in khaki and sweating on this warm and humid dark night in the heart of Central America, these men are considered to be Panama Canal's first line of defense. They are one of a few units in the U.S. Navy that remain on combat alert 24 hours a day. Together with Panama's Guardia Nacional—the Republic of Panama's army—this riverine warfare unit is tasked with repelling all invaders who seek to destroy or take over the Panama Canal and its shore-based assets.



# Navy Men in Panama

Three boats have been loaded and are ready: one 50-foot PCF (patrol craft, fast), and two PBRs (patrol boat, riverine). The three will transit the Panama Canal; in this exercise they will share the locks with a merchant ship from Sweden, and later another from Japan. After about eight hours, they will come out on the Caribbean side of Panama and make their way east to the Chagres River.

There, the unit will team up with Army troops of the U.S. Southern Command—headquartered in Quarry Heights (also on the Pacific end of the canal)—and participate in four days of riverine/jungle warfare exercises.

Final equipment checks are made, and

then Senior Chief Gunner's Mate Raymond Stewart gives the word: "All right! Let's get a move on if we're gonna keep our oh-five-thirty rendezvous with that Swedish cargo ship!" His voice, too, is nearly lost in the combined engine noise of three boats.

Stewart, who is the senior chief petty officer of the command at Rodman, is one of the few members of the patrol division who has had combat experience in Vietnam. He takes the wheel in the pilothouse and accelerates the engines of his PCF. The two PBRs follow suit, and within 30 seconds the black-hulled boats are lost in the darkness.

\*\*\*

Lieutenant Chip Bunce, officer in charge of the Combat Harbor Patrol Division, waits in his office later that morning. He has just heard that Stewart's flotilla met up with their Swedish "escort" without



incident. They had already passed through the Miraflores Locks, the first of three sets of locks that make up the Panama Canal.

"Our main job here is to provide a waterborne defense of the Panama Canal, but we're really tasked for any type of conventional or unconventional warfare" Bunce said. "We train with many special units—the SEALs and UDTs of the Navy, Rangers and Special Forces of the Army, the Air Force's Combat Patrol Team, the Marine Corps and, of course, Panama's own Guardia Nacional."

In an adjacent room, Bunce's executive



*An ideal setting for riverine/jungle warfare training is Panama's Chagres River, with its jungle-bordered banks. It is on the Chagres that naval units of Panama's Guardia Nacional and the U.S. Navy's Combat Harbor Patrol Division, Naval Station Rodman, hone their skills and conduct exercises with other riverine units.*



ALL HANDS





officer, Lieutenant Carl Hurst, pores over training schedules. He wears a camouflage uniform while Bunce is in khakis. As the division's training officer, he must ensure that each member of the 35-man outfit meets the qualifications for the 9533 naval enlisted classification: riverine warfare specialist.

"There are several special boat units in the states that go through the same essential training as we do down here," Hurst explained. "But because of our geographic and strategic location, our level of training and preparedness is critical.



After all, we're the only ones right here at the canal."

A typical training lesson might be a 90-minute discussion on a certain strategy or tactical plan in connection with the operation of the patrol craft, or perhaps something more specific. Lecture topics include such things as reconnoitering, foreign weapons, ammunition color codes, operation of VRC-46 and -35B radios, damage control and engine troubleshooting, or how to handle prisoners of war.



"Personnel come here from all areas of the Navy," Bunce explained, "directly from boot camp, or ships or major shore bases. Whether they've got any experience or not, we take care of it with our extensive training program. We emphasize continual training—we don't let up. For any given week, we'll have at least three major training evolutions scheduled."

The training is necessary for the levels of responsibility encountered at a combat-ready command located in the heart of Central America.

Hurst said that when petty officers report to the patrol division, "We expect them to act like petty officers. That means being responsible in a leadership position. If someone doesn't know his role as a petty officer, then we teach him real fast. We just can't afford to have people around who don't know how to use their authority.

"For example," Hurst continued, "one of our second class petty officers is a boat captain for a PBR. That means he's responsible for a crew of four, plus a boat that's carrying a dual-mount .50-caliber machine gun and a 60mm mortar.

Chief Warrant Officer Jim Whittingham is the maintenance officer for the division. This morning, he works across from Bunce on prices for spare parts that he needs through local purchase. "We've got our own people trained to maintain these boats," he said, "and we have an ongoing program of preventive maintenance to keep them out of the shop in the first place.

"The material needed to deal with most minor problems is right here at the naval station. In addition, we get a crane and yank these boats out of the water every six months to give them a good going over. But if we need to have some extensive hull work—either the aluminum hulls of the PCFs or the fiberglass ones on the PBRs—then we have to contract the work out to some local firm. We just don't have the facilities here to do the work properly."

Each year since the latest Panama Canal Treaty went into effect in 1979, the U.S. naval forces there have carried out a joint

*Cross training is important to riverine warfare units, and every riverine warfare specialist must meet rigid qualifications before obtaining the 9533 NEC.*



# Navy Men in Panama

exercise with Panamanian naval units of the Guardia Nacional. Also included are Naval Reserve special boat units from different parts of the United States. Various elements from the Army, Air Force and Marine Corps forces based in Panama also participate.

According to Stewart, this year's exercise, *Kindle Liberty*, went very well. It showed that the forces dedicated to defend the canal can cooperate well together, integrating their individual units into one overall military operation. "We terminated *Kindle Liberty* this year with a live-fire exercise; it was a very effective demonstration which showed the amount of firepower we have at our disposal."

Besides *Kindle Liberty*, the focus on training for the "river rats" continues to be in the Chagres River on the Caribbean side; there joint exercises are carried out on a regular basis with many of the nearly 6,000 U.S. Army troops stationed in Panama.

"The Chagres River is an ideal setting for jungle warfare training," said Bunce.

"Both sides of the river are bordered by dense jungle with all sorts of snakes, bats, alligators, monkeys. There are even sharks in the waters. We have to prepare ourselves to survive under these conditions. We may find ourselves fighting in just such an area someday."

The locks at Gatun on the Caribbean end of the canal are left in the wakes of three black-painted boats as they open up their throttles and head toward a red, late-afternoon sun hanging low over the Caribbean. But the sun sets quickly in this part of the world. The chop gets a bit higher as the boats reach open sea in their swing eastward toward the Chagres.

One of the window panes in the pilot-house of the PCF has been taken out for replacement. Every now and then, the spray will come up over the bow, sail through the window and douse Lance Corporal George Daniels sitting in his port-side chair. Daniels is a Marine Corps reservist who lives in Panama, who also drills with the patrol boat squadron. Boat captain Stewart, at the helm, can't hold back

a grin when he sees his crewman's drenched face, "I would lend you my umbrella, but I forgot to pack it."

Stewart maneuvers the craft toward the river's entrance and lets one of the PBRs overtake his boat and then pull ahead. Then all three boats slow. The reason is a large "s"-shaped reef that guards the entrance to the Chagres. The PBR, with its 2-foot draft, will act as a scout for the deeper-draft PCF (about 7 feet). Stewart watches his Fathometer; its constantly shifting numbers bear witness that the depth beneath the hull is by no means constant.

"Anybody can jump on these boats and ride them for four or five days and just sit behind the wheel here, or sit behind a weapon." Stewart talks while his eyes dart back and forth between the water in front of his bow and the readout of numbers on the Fathometer. "But that's not the whole concept by any stretch of the imagination. You have to be able to jump into anyone else's shoes on the boat without warning."

"Each person in this crew is cross-trained to perform jobs of engineman, gunner's mate, quartermaster, navigator or boat officer. If you don't know how to 'fight' the boat and don't know about things like the weapon systems, maneuvering and evasive tactics, then you may as well just go home. Anybody can drive a boat."

He glances at the Fathometer; it shows that only 6 feet are beneath the keel. "But not just anybody can run a boat like this aground on a reef." He chuckles and spins the wheel. In response, the depth increases to 10 feet.

Once the mouth of the Chagres has been negotiated, Stewart opens up his PCF, and the smooth waters are roiled by the churning propellers of the patrol craft that now has its bow out of the water. It's hard to believe that the craft is moving at *only* 25 knots. The crew on deck watches the green serenity on either side fly by as the wash created by the boats boils onto the river's banks.

As the flotilla slows, the moon appears above the forest of trees on the port side. The river turns from green to black. Stewart



*A U.S. Army sergeant interrogates an "enemy" infiltrator.*



art brings his boat alongside a makeshift pier, where 14 camouflaged American soldiers look appropriately grim. Next to them, a native fisherman sharpens a fishing knife on a whetstone while tending his line.

Stewart and his men disembark and join the soldiers on the pier. They are mumbling many things, among them—"Did you see how fast that thing was going? Why do you think their boats are painted black? Look at all the guns that big one is carrying!" (Not only does the PCF have a dual-mount .50 caliber gun on the bow, but also another .50-caliber machine gun on the stern, an 81mm mortar, and usually an M-60 machine gunner is perched above the pilothouse.)

One of the soldiers, a ranger, makes his way forward. "Chief, I'm Staff Sergeant Mitchell Ganz. I'll be accompanying you on your boat as an evaluator/observer for the Jungle Warfare Branch and the Jungle



*Above right: Training doesn't allow much time for relaxation, but there are times when the men can take a few minutes' ease on the patrol boat. Below: For canal exercise Kindle Liberty, four 31-foot patrol boats from Special Boat Unit 22, New Orleans, La., are loaded onto an Air Force C-5A Galaxy for airlift to Panama. Photo by JO2 Lance Johnson.*



Operations Training School at (nearby) Ft. Gulick." Stewart shakes his hand. "Glad to have you aboard, sergeant. Is everybody ready for the briefing?"

The soldiers and sailors become one group. The fisherman casts his line anew and hopes for a few more fish before the boats start racing up and down the river.

Coordinates are given, call signs handed out, watches synchronized, and rendezvous times are agreed upon. Then the wait begins. Everyone will jump off into the jungle at 10 p.m.

One of the PCF's gunners, Electronics Technician First Class Frank Jacdeo, checks his dual .50 caliber/81mm mortar gun mount. The harsh metallic clicks seem out of place against the backdrop of wildlife noises and the fisherman's humming reel. "On exercises like this," Jacdeo said, "the only live rounds we carry are for the .45-caliber pistol on board. The rest are blanks. But when we escort a high-value ship through the canal—like a merchant ship with a load of uranium, or a submarine like the USS *Michigan* (SSBN 727)—we're armed to the teeth."

Finally, the hour arrives just as the fisherman is packing up his gear. The soldiers climb on board the PCF, and it races off with them into the night. The two PBRs,

assigned reconnaissance, go their separate ways. At a certain point upriver, Stewart abruptly slows his boat and turns it toward the land. He is about ready to run the bow onto the bank to land the troops when he spots something in the foliage dead ahead. He shouts, "Open fire!"

The Army men oblige and open up with their M-16 rifles. They rush off the boat in pursuit of the "aggressors" (some 100 are waiting for them in the jungle, Army troops in fatigue shirts and blue jeans playing the role of the enemy). All return minutes later; four prisoners are with them, blindfolded and bound. As they are brought aboard, the PCF's crew uncovers a rubber boat full of supplies hidden along the bank and makes it fast to the starboard side of the boat: spoils of combat.

On the return to base, Sergeant Ganz commands one of the prisoners to: "Put that cigarette out! What do you think this is, a pleasure cruise?"

Stewart maneuvers his craft close to an Army landing craft. "PCFs are ideally suited for this type of combat. The river presents a straighter course than did the waters in Vietnam, so you can't move around as much.

"Some people may say these boats are 18 years old and they aren't good any-



# Navy Men in Panama

more. But it wouldn't matter if they were 100 years old as long as they are in good shape. They are entirely self-sufficient for 30 days. We carry our own fresh water, power supply, food, ammunition and up to 800 gallons of fuel." Stewart is confident that the Navy's forces in Panama are sufficient to handle threats to the canal.

The four prisoners are turned over to the shore forces. One is relieved of papers containing radio frequencies and some information on a planned "enemy" ambush. The papers are studied by Ganz as the PCF races upriver; they're determined to foil an "ambush."

Meanwhile, one of the PBRs, under Quartermaster Third Class Steve Clement, has gone up a tiny tributary and cut its engines. The crew listens for sounds that might reveal an enemy presence.

All around, the boat is hemmed in by thick jungle that has turned multiple shades of gray beneath the bright moon. Clements whispers, "Most of us are assigned here; there are only about three or four volunteers.

"People make the usual complaints, but the riverine warfare is so different that they get interested in it real soon. It's just so different out here, nothing at all like what most people picture the Navy to be—you know, big gray ships slugging it out on the ocean.

"But we've got an important job," he added. "Don't think for a minute that we're about to forget about that."

Tonight, all is quiet as the crew tries to catch sounds of enemy activity. The enemy, however, appears to be equally quiet tonight. There will be no fire fight at this end of the river this night.

Meantime, Stewart has purposely run the bow of his patrol craft into the mud of a bank, just around a bend in the river. It is here that the "enemy" is supposed to pass; it is here where the "river rats" and their Army scout will wait to surprise those intent on surprise.

A low, mechanical hum is heard across the water—perhaps an approaching motorboat. But Engineman Second Class Wyatt Hart, moving his M-16 quietly from one hand to the other, shakes his head, "It's just the Gatun Locks opening up again."

Monkeys in the forest choose this moment to begin their all-night chattering. Mosquitoes find the boat's crew. On this long, black river, the dark seems to be much closer now—it would never venture as close in a city, or even on a country road.

The waiting continues with Ganz mon-

itoring radio frequencies, Jacdeo and Hart taking turns with the infrared imaging devices—peering into the darkness where suddenly everything is visible in sort of a fluorescent green—and Lance Corporal Daniels watching the radar scope for any movement on the river.

On the opposite shore, something

## Reservists

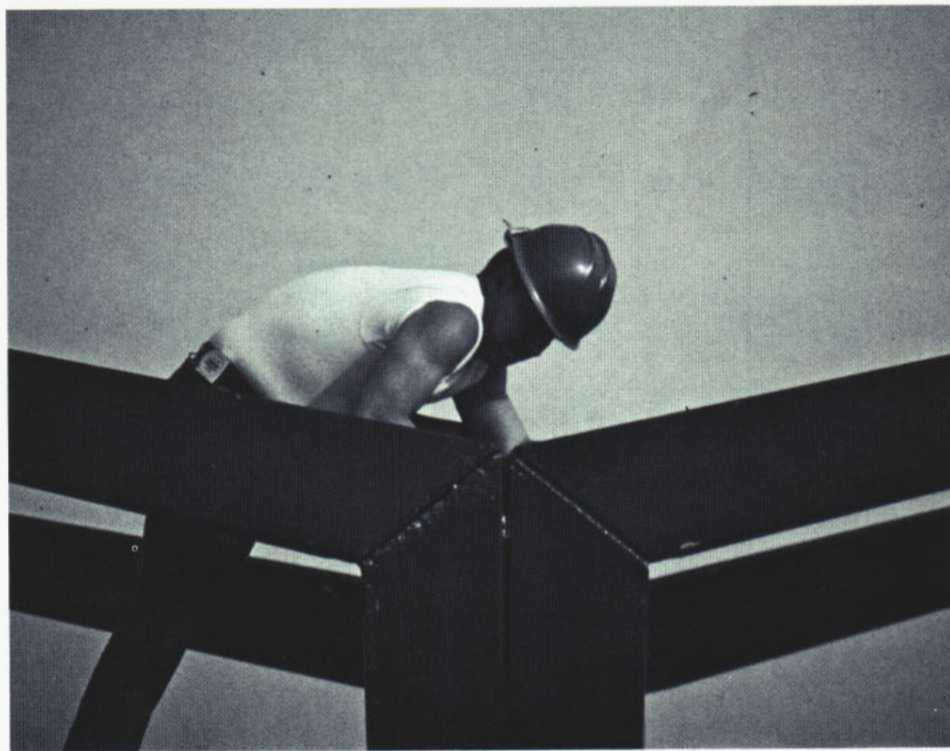
A 53-man detachment of reserve Seabees showed up in Panama recently to give U.S. Naval Station Rodman a helping hand. These reservists, members of Reserve Naval Mobile Construction Battalion 23 at Ft. Belvoir, Va., spent two weeks there to fulfill their annual active duty for training requirement.

Once settled at the naval station, on the Pacific entrance to the canal, RNMCB 23's detachment tackled several construction projects it had been tasked to work on by the Eighth Reserve Naval Construction Regiment.

These included:

- Erection of a steel roof over a baseball field grandstand.
- Upgrading plumbing at unaccompanied personnel housing.
- Placing new streetlights (on concrete poles) throughout the station.
- Reconfiguring the entranceway to a floating dock.
- Building a recreation shelter.
- Setting poles for a new link fence at the Marine barracks.

Of these projects, the grandstand roof was one of the more challenging. "That





splashes into the river, but nothing is there. Probably an animal. Another creature begins to make an ungodly sound at intervals. The noise is like someone moaning with a mouth half-full with water. The mosquitoes increase. The dark means nothing to them.

A sharp report—gunfire—breaks out in

the distance. Somebody has run into somebody else in the jungle; each has decided that the other is the enemy. The exchange is brief. It's long enough, though, to tell the boat crew that one of the Army teams inserted into the jungle a couple of hours ago has most definitely found the "aggressors."

Stewart gives up on an ambush and revs up the engines. Soon the boat is racing off again, still in search of the "enemy."

The exercise continues on into the night. In Panama, riverine warfare is a serious business—for these sailors it's akin to "a moral duty" and "a solemn responsibility."

# Lend a Helping Hand



project, as well as the floating dock, required an extensive amount of steelwork," said Lieutenant James Silvey, officer in charge.

We had only four steelworkers among our people. They had put in a tremendous amount of work during those two weeks. But I had to pace their effort to make certain that none of them suffered heatstroke or exhaustion.

"One thing about Panama," said Silvey, "it's certainly warmer than Cumberland or McKeesport ever gets."

The 53 men who made up the detachment hailed from Pittsburgh, Johnstown, Altoona and McKeesport in Pennsylvania;

and Cumberland, Adelphi and Baltimore in Maryland. They found the humid conditions anything but hospitable. The hard-working Seabees from up North had to restrain themselves to escape ill side effects.

Silvey made certain that each work crew had plentiful supplies of water and a shady spot nearby where longer-than-normal lunch breaks could be taken. Everyone was cautioned repeatedly not to overdo their "can do" spirit. As a result, no incidents of heatstroke or heat exhaustion occurred during the two-week period, when temperatures averaged between 85 and 90 degrees Fahrenheit.

Despite the slower pace of work, the reservists left their grandstand job 64 percent complete, and they finished the floating dock modification.

Two unforeseen assignments were also completed: a building demolition job, and installation of office partitions at Naval Station Rodman's personnel office.

The detachment was required to work through its two weekends in Panama; this was done to take full advantage of equipment availability at the station's public works department and to avoid undue conflicts with that department's regular schedule. In all, the detachment worked a total of about 400 man-days.

But the morale of the group was kept buoyant in other ways: the station's swimming pool was available each evening and a two-day liberty was arranged during the week which included visits to historical sites, the Miraflores Locks at the Panama

Canal, and a shopping trip in downtown Panama City. Some of the Seabees even got to stay overnight on Taboga Island—a preferred recreation spot on the Pacific side of the canal.

Silvey said that the two-week training period gave the Seabees "a chance to work on projects that were generally more complex than some others. It also gave us an opportunity to learn about another culture and visit a country that we might not otherwise have seen."





# Aircraft Testing

## Just Plain Hard Work

Story by Mike Kolenick  
Photos by PH2 Kelli Templeton

The responsibility they accept each day is awesome; scores of lives, millions of dollars and the success of future naval missions could be affected by what they do today.

They work for those who serve aboard USS *Enterprise* (CVN 65), USS *Nimitz* (CVN 68), USS *Carl Vinson* (CVN 70) and the other aircraft carriers in the Atlantic and Pacific fleets. Wherever there are Navy aircraft, they have left their mark. They are the people who perform testing and evaluation at the Naval Air Test Center, Patuxent River, Md.

It takes a special kind of person to take on the job of testing naval aircraft. As the author Tom Wolfe said, it takes "the right stuff."

### Test Pilot

After the activity of early morning flight briefings and testing deadlines, Commander Jon Eastman takes a brief break in his office at the McDonnell Douglas hangar.

Eastman, an F/A-18 and F-14 test pilot at Strike Aircraft Test Directorate, recalled that he sought a change when he

applied for the U.S. Naval Test Pilot School at NAS Patuxent River nearly three years ago. TPS turned out to be just what he needed. "I was getting stale in the fleet. The school instilled a love of aviation in me," he said.

Now, after many flight hours in test aircraft, Eastman says it's still thrilling to him. However, he added that he has taken a realistic outlook in his nearly two years as a test pilot.

"There are days when the luster is gone, and it's just plain hard work," he said.

For a test pilot, work comes in peaks and valleys, he explained. As an aircraft testing phase reaches its peak, a 12-hour workday is not uncommon. A pilot may report for a 6:30 a.m. briefing, then take off at 8 a.m. for a two- or four-hour test flight. After lunch, a briefing and afternoon flight would last until 5 p.m. Afterwards, there are flight reports to file. A pilot might leave work by 7 p.m., Eastman said.

But there's more to being a test pilot than just working hard. A test pilot has to rely on his experience as a fleet pilot and even as a student pilot, Eastman said. For



example, in testing an aircraft for fleet use, a test pilot has to put himself in the place of the fleet pilot, look at the flying qualities and safety margins of the aircraft and say "is that going to be acceptable?" In evaluating a jet trainer, the pilot has to look at the aircraft from a different perspective. "That aircraft's got to be very forgiving," he explained.







*Checking, double-checking, briefing, talking it over—and just plain hard work—help make for a successful test and evaluation program at NAS, Patuxent River, Md.*

Eastman acknowledged that there is some risk to his line of work, but not as much as most people think. Aircraft testing is done much as a baby learns to walk—one step at a time. “We don’t do anything foolish,” he said.

Most testing involves confirming data from the aircraft’s contractor, so the tests are not being accomplished for the first time. There are some important exceptions, particularly in spin testing and minimum airspeed catapult tests, Eastman said. “We accept a certain amount of risk.”

Most important, a test pilot has to have integrity. When the flight is over, the reports have to be filled out. Discrepancies are recorded, big or small, regardless of deadlines, test schedules or other time constraints.

“You have to be critical; naval aviation can be very unforgiving if you’re not,” Eastman said. “Failing to report a defect in an aircraft is considered an unconscionable act. We have to live with the results of what we do.”

### **Project Officer**

Some people know how to manage details, figures and calculations. Others do

well at managing people; knowing how to task them effectively. Then there are a few people who are expert at both.

As an aircraft test project officer, it takes a person who can manage both figures and people to do the job. Marine Major Charles Schillinger knows the requirements of the job well. He was a project officer at NATC for two years.

Schillinger, of the electronic warfare and reconnaissance branch of Systems Engineering Test Directorate, was project officer for the Increased Capability II System aboard the EA-6B *Prowler*.

Although he had some experience in the operation of the system, Schillinger recalled that his knowledge of its inner workings was limited when he took the job in June 1980. “I tried to learn as much as I could about the system,” he said.

The knowledge would serve him well as the project progressed. By the time Schillinger left the project two years later, his team had identified more than 100 areas where the system could be made safer, more effective and easier to operate.

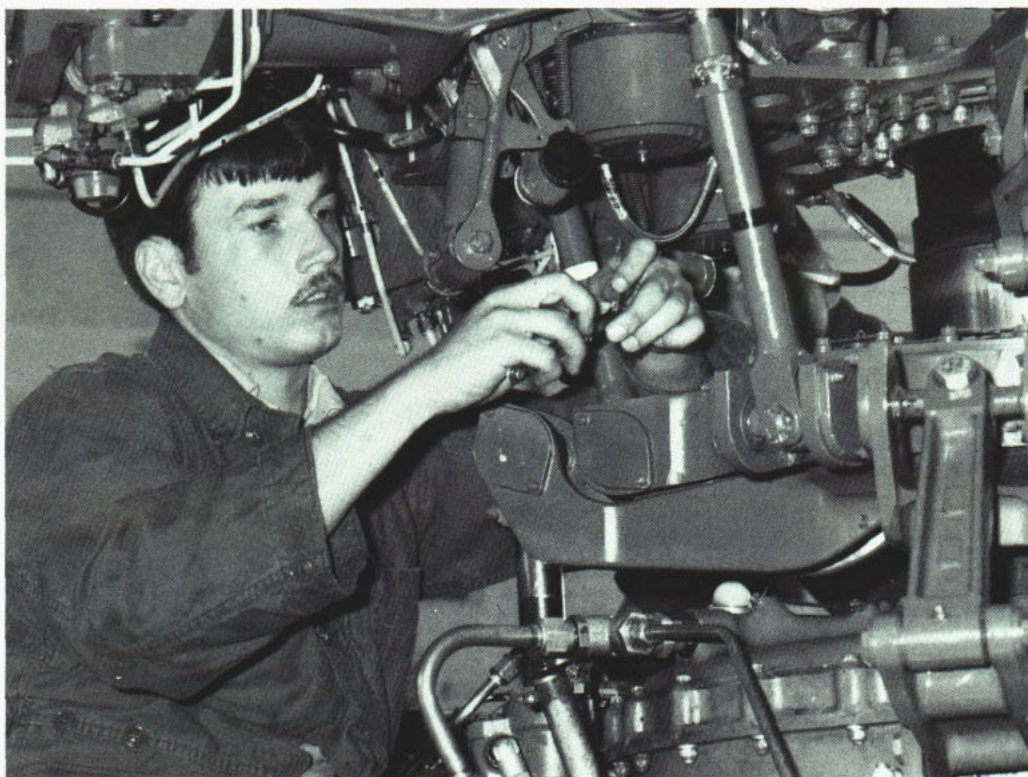
In checking out test results, the project officer is often the first in the team’s chain to find discrepancies. But finding them is not enough. Solutions also have to be found

and implemented. To accomplish that, Schillinger said there must be open communications with the system’s builder.

Sometimes, project personnel find both a problem and a solution, so contractors make the design change and the problem gets corrected. In other cases, it is the contractor who works out the solution. But in any case, a solution could not be found if project and contract engineers weren’t communicating with each other, Schillinger said.

You can’t have test results when you can’t test, so the project officer is usually the one to find the needed manpower and equipment. “You find the assets around the base and go and get them,” Schillinger said.

Then, there’s the job of making sure the project has enough funding. Schillinger said that a straightforward approach with project sponsors has worked for him. A simple explanation of where the project is, what remains to be done and how much it will cost has been enough to keep sponsors at higher commands satisfied. “Nobody argues with you when you bring home the truth. When you start guessing and ‘by-goshing,’ that is when you get into trouble,” he said.





# Aircraft Testing

Keeping testing on schedule is another part of the job. Projects at the test center sometimes have to compete for time at the Chesapeake Test Range and other data acquisition facilities. "You have to convince people that you need a certain time slot to get your test done," he added.

It has been Kneeland's first job as a test engineer, and he says he has learned his share of on-the-job logic since he started five years ago. He learned the significance of test pilots' observations. "Pilot comments are valuable; in some instances, they are more valuable than data," he said.

It was a lesson that was not too hard to learn. Kneeland had been a Navy pilot, spending most of his four years in service at the test pilot school as a scheduling officer. "I got out with 1,000 hours flight time," he added.

Like other members of the testing team, he said that he's spent long hours at the job, mostly in analyzing test data on the Hornet's flying qualities. At the peak of a testing phase, 11- to 12-hour days were not uncommon.

Since he began work on the *Hornet* project, the team has found a number of discrepancies. With the assistance of the plane's builder, McDonnell Douglas, most have been eliminated through design and

software changes. Kneeland said that the contractor has been more than willing to make necessary changes to the aircraft. "Everybody's got the same end point—to get the best aircraft possible," he added.

He explained, however, that there are some changes that just can't be made. In the quest to make a perfect aircraft, an engineer finds that it just isn't possible. "You have to be careful. Sometimes by solving one problem, you create more problems."

The *Hornet* project is winding down now, although further testing will go on for some time. Fleet squadrons are now using the new tactical aircraft, and Kneeland said he thinks fleet pilots will like it. "It has characteristics that no fleet pilot has ever seen. In general, it's more maneuverable than the A-7 or F-4."

## Aircraft Mechanic

It's a sometimes grinding regimen of overtime and weekend work. It's broken fingernails, skinned knuckles and coverall stains that won't wash out. But when aviation mechanics see their aircraft take to the sky, the feeling of satisfaction makes the effort all worthwhile.

The pain and satisfaction of being an aircraft mechanic are well-known to Avia-



tion Machinist's Mate Third Class Robert Cook. He's been working at Rotary Wing Aircraft Test Directorate for the past 2½ years. Cook says it's a job he's happy with.

Of the people who work around the project officer, the project engineer is the closest. A close working relationship between the two is essential to the project's functioning. Often, major decisions on future testing are made jointly by the two parties.

Schillinger recalled that as a project officer, such joint decisions are sometimes not easily made. "We had our disagreements, but once we agreed, we never looked back. We pressed on with the project."

In fact, Schillinger and Dan Macone, the project engineer, often performed the tests, mostly done in a laboratory setting inside a hangar. "The size of our project allowed us to be involved with every aspect of testing," Schillinger said.

Although the size of the testing program has a lot to do with how involved a project officer can get with specific aspects of testing, it is a key factor to the success of any project, Schillinger believes. "You've got to get involved. You may not know all about a project, but you learn. You can't





say, 'go do it and let me know what happens.' "

### Test Engineer

After the test flight is over, the data has been recorded and the pilot has filed a report, somebody has to check all the data. Somebody has to find the flaws. That's the job of the test engineer.

It's a job with a lot of responsibility, and the bigger the project, the bigger the responsibility. Strike test engineer Bernard Kneeland knows a good deal about it—he was a project engineer on the F/A-18 *Hornet*.

Kneeland recalled that he began working on the project in 1978, shortly before the *Hornet*'s first test flight at Pax River. Back then, the project was the start of a new concept: principal-site testing. The idea had the potential of cutting testing costs, but it required that Navy and contractor people work hand-in-hand to get the job done. "At first, there was a little skepticism on both sides, but after a while it all went away," Kneeland said.

As a result, Kneeland said he is convinced that the principal-site testing has not only saved money but has also given the Navy a better product. "We wouldn't know as much as we do about the aircraft," he added.

Cook, an H-3 helicopter mechanic, said that repairing the H model *Sea King* keeps him on the go. Unlike a fleet squadron, maintenance teams at testing activities make some aircraft modifications and install test equipment, in addition to doing routine maintenance.

"The work piles up, but we get it done as fast as possible," Cook said, taking a break from a rotor head replacement at Rotary's hangar. Looking out toward the flight line, he added, "We'd rather have them out there than in here."

Mechanics muster at 7 a.m., then head for the flight line to police the area of debris to prevent FOD—foreign object damage. To some, it may seem like tedium or make-work, but in the aviation business, it's essential. Items as small as

a nut or cotter pin can be sucked into an aircraft engine, causing thousands of dollars in damage.

After the flight line sweep, it's back to the hangar. Maintenance team leaders task their mechanics, tools and parts are checked out, and work begins. For Cook, the workday ends around 3:30 p.m., but in the peak of testing, overtime and weekend work are not unusual. "I've had a lot of days like that," he commented.

The work is hard, but there's a lot at stake, and the mechanics know it. There's a high rate of "failure control" at Pax. Mechanics routinely report aircraft defects and safety hazards. "We're conscious of what we do. We want those pilots to come back safely," Cook said.

But perhaps most important is the teamwork found inside the hangar. It's not unusual to find a project officer or engineer up on a maintenance stand explaining an aircraft modification to a mechanic. You might find a test pilot adding his input to help a maintenance team solve a difficult repair job.

Within a maintenance team, there's a certain loyalty that stands out from the crowd. "That's what I like best about working here; they're just a great bunch."

It's that rare mix of ability, initiative

### Non-stop Flight

For the first time in Marine Corps history, a CH-53E *Super Stallion* flew coast to coast in a non-stop flight from Patuxent River, Md., to the Marine Corps Air Station at Tustin, Calif.

The *Super Stallion* and its crew of five arrived at Tustin on July 6 at 9 p.m. EST, ending a 15-hour flight. The attack/assault helicopter was refueled four times en route by Marine Corps KC-130 *Hercules* helicopters.

This is believed to be only the second time in naval history that such a helicopter flight has been made. A Navy CH-53D made the first non-stop flight several years ago, arriving in 19 hours.

The Marine crew flew to California to prove a portion of the contractual agreement between the Navy and the aircraft's builder, United Technologies' Sikorsky.

and teamwork in the people who work at Pax River that make it what it is. They are the test center's most valuable asset—those with the "right stuff."



Test engineers, pilots and ground crew members work together during a test flight.



## ***Blood banks in need of donors***

Blood banks throughout the United States face a serious shortage of available blood for surgery, for accident victims and other medical treatment because of adverse publicity concerning the threat of acquired immune deficiency syndrome. AIDS is a dangerous disease for which a cause and a cure are being aggressively sought.

Misinformation has led to rumors that AIDS may be contracted while donating blood, causing a serious decline in donors. The fear that AIDS can be contracted by donating blood is completely unfounded. Blood collection agencies use sterile, disposable needles which are used once, then discarded.

A related trend being discouraged by the American Red Cross and other blood collection agencies is the increased use of "directed donations" or "donor pools." These involve families and other groups donating blood for use only by

members of that group. Apparently, this procedure is thought to preclude the introduction of AIDS or other diseases to receivers of blood transfusions. This practice has not proved successful, however, as members may unknowingly introduce diseases into the pool. The practice also results in undue waste of donated blood and delay in the blood donation process.

While it appears possible to contract AIDS through a blood transfusion, every effort is being made to eliminate this possibility by careful blood donor screening. The chance of contracting the disease as a result of direct transfusion is estimated as less than one in 1 million.

The upcoming Thanksgiving/Christmas holiday season historically is a period of increased blood demand. All hands who are in good health are encouraged to donate blood regularly to build up reserves.

## ***Role of women in the Navy***

Recent media reports regarding the role of women in the military have given the impression that women now have less opportunity to contribute to the national defense.

In a memorandum, Secretary of Defense Caspar Weinberger challenged these reports and reaffirmed the crucial role of women in the military. "It is the policy of this department that women will be provided full and equal opportunity with men to pursue appropriate careers in the military services for which they can qualify. This means that military women can and should be utilized in all roles except those explicitly prohibited by combat exclusion statutes and related policy."

The memo emphasized that the combat exclusion rule should be interpreted so as to keep as many career opportunities as possible open for women.

"Women contribute significantly toward the high state of readiness we currently enjoy under

the all-volunteer force. They are a vital resource for both our active and reserve forces and will continue to fill critical requirements as equal partners with men," added Weinberger.

The latest selection of chief petty officers calls attention to the continued opportunity and increasing role of women in the Navy. Women chief petty officers were selected for the first time in eight ratings, all of which have been termed "non-traditional." Those ratings are: operations specialist, boatswain's mate, engineman, electrician's mate, interior communications electrician, lithographer, hull maintenance technician and aviation ordnanceman.

Additionally, opportunity for enlisted women to serve at sea will nearly double over the next two years. By the end of FY 85, the number of enlisted women aboard ships is projected to increase from the present level of 2,614 on 25 ships to 5,000 women aboard 27 ships.



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## Pay of loan defaulters to be checked

While the guaranteed student loan program has provided educational opportunities for hundreds of thousands of Americans, a large number have not repaid these loans.

Earlier this year, the federal government took initial steps to recover defaulted loans from federal employees by reminding them of their responsibilities through written notification.

As a result, approximately 5,000 individuals responded, returning payments totaling more than \$2 million. Many more federal employees, including approximately 11,000 active duty service members, are still in default. These individuals owe the government more than \$65 million.

Recently enacted laws permit the Department of Education to work with other federal agencies, including the Department of the Navy, in collecting these debts. Members who have not responded to notification are urged to contact the Department of Education immediately to arrange repayment. Individuals failing to do so could face withholding of up to 15 percent of their pay until the loan is paid off. In cases where litigation is necessary to recover a debt, as much as 25 percent of the individual's pay may be withheld. All members with outstanding student loans have a moral and legal obligation to ensure that loan payments are current.

## CNO stresses scrutiny of spare parts pricing

In NAVOP 086/83, Chief of Naval Operations Admiral James D. Watkins placed emphasis on the procurement and pricing of spare parts, noting that a recent audit of the Department of Defense spare parts pricing procedures had received widespread media attention.

In most instances, those responsible for the requirements of determination and procurement of material do seek the lowest possible cost to the Navy. Further, the majority of prices negotiated with Navy contractors are fair for all parties—yet there are exceptions. Unreasonable pricing has occurred because of a failure to use common sense in challenging individual spare parts prices that were obviously out of line.

In view of the importance of this matter,

CNO has requested that, "user personnel who believe that the prices of spare parts drawn from the supply system are excessive for whatever reason, should report the suspected overpricing to the fleet material support office (Commercial: (717) 790-2664 or Autovon: 430-2664) so that an investigation can be conducted and action taken. Fleet Material Support Office Instruction 4200.1A provides guidance on what information should be reported.

"Providing proper logistics support for our fleet and shore units demands that we get full value for our spare parts dollar. I charge all involved in any way with identification, procurement and/or use of spare parts to take this initiative as a personal challenge."

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# Sailors of the Year

## Seeking More Responsibility

Maybe it could happen this way: Two sailors are leafing through the latest *All Hands* . . .

"Did you read about Kimsey?"

"Kinsey. The sex researcher?"

"No, Kimsey. Kevin Kimsey. He made sailor of the year along with Patrick Brophy, Douglas Roberts and Alfred Valderrama."

"Big deal, sailor of the year. What did Kimsey do that was so great?"

"Well, he rescued an injured man from waters infested with sea snakes. He helped recover victims of a plane crash from a freezing river. He even went to Saudi Arabia and trained the Royal Saudi Naval Forces Drill Team."

"Now how did he get to do all that?"

"He did just exactly what everybody says not to do, he volunteered."

...

If there is a common thread between Kimsey, Brophy, Roberts and Valderrama, it is obvious respect for themselves and for their country. Each channeled his respect into seeking more responsibility and challenge than was required of him, and the immediate reward was the self-satisfaction of a job well done.

These four sailors—Roberts representing the Atlantic Fleet; Brophy, Pacific Fleet; Kimsey, shore; and Valderrama, reserve—stood out as leaders and achievers.

*This year's crop of winners (l-r): EN1 Alfred F. Valderrama-Reserve; STC(SW) Douglas Roberts-Atlantic Fleet; QMC(SW) Patrick M. Brophy-Pacific Fleet; and ADC(AC) Kevin M. Kimsey-Shore. Photo by PH2 Liz Schading.*

Their springboard to sailors of the year was recognition by their superiors of the enterprise these men took in the everyday tasks assigned to them. Ultimately, they were chosen as examples of the finest sailors in the Navy.

The title sailor of the year carries with it more than a pat on the back. Meritorious promotion tops the list of benefits. During a week in Washington, D.C., each was awarded the Navy Commendation Medal by Chief of Naval Operations Admiral James D. Watkins; they were promoted by Under Secretary of the Navy James F. Goodrich, and they visited Vice President George Bush. The sailors and their families traveled to Capitol Hill and talked with their senators and representatives.

And, courtesy of the Fleet Reserve Association—in Valderrama's case, the Naval Enlisted Reserve Association—the sailors and their families departed at the end of the week for five days of rest and relaxation in the CONUS city of their choice.

### QMC (SW) Patrick M. Brophy

Chief Quartermaster (SW) Patrick M. Brophy, who enlisted in 1974, terminated his only shore assignment thus far to go back to sea to bone up in navigation so he could be ready for the quartermaster first class test. But upon reporting to his new sea assignment, he was immediately made a master-at-arms for a three-month stint, a collateral duty entirely out of his rate. Although disappointed, Brophy dug in and found challenge in his new position.

"I had to feel the importance of the job before I could instill spirit in the mess cooks," Brophy said. "And the importance was that in making the mess decks clean, we almost forced people in the adjacent spaces to clean up because they started to look bad."

"People noticed that the mess decks were improving. They went back to their spaces and looked around and decided they needed some improvement." Brophy's initiative filtered through the ship. Despite his collateral duty assignment, he still passed the QM1 test on his first try.

Once back on the bridge, Brophy volunteered to stand junior officer of the deck watches while under way. He became division officer for the quartermasters and worked as a navigator.

"The leadership that people miss quite often is showing other people that you care about them as individuals," Brophy said. "I've had a lot of fine teachers. I showed a concern for my job, and in turn, they showed a concern for me."

Brophy, the father of four small children, considers sea duty a fact of life in the Navy. "An extended deployment is difficult for both wife and husband. But that one day when we pull back in is fantastic. The lines go over and I look down and there are my wife and kids. I go down there and hug her and it's a love relationship—not beginning all over again—but enhanced by that separation. It's a higher level of love."

Brophy, his wife, Lisa, and their children spent their five-day vacation at Disney World in Orlando, Fla.



# Sailors of the Year

## ADC (AC) Kevin M. Kimsey

Chief Aviation Machinist's Mate (AC) Kevin M. Kimsey defies the stereotype of the drillmaster. His quiet demeanor coupled with a calm no-nonsense voice produced stunning results from the 150 enlisted members of the U.S. Navy Ceremonial Guard in Washington, D.C.

Kimsey requested duty in the ceremonial guard during recruit training in 1974 and was assigned as a member of the unit. He enjoyed the duty, and during that time, he studied on his own to become an aviation machinist's mate.

His next assignment—to a helicopter anti-submarine squadron—included deployments aboard USNS *Chauvenet* (TAGS 29), a Military Sealift Command research ship. One morning before breakfast, Kimsey was standing duty as landing signalman when word came over the radio that a man had been hurt during helo operations about two miles away. The man was in the water, and the helo crew was struggling with its own mechanical problems.

Qualified as a search and rescue air-

crewman, Kimsey requested permission to launch a rescue boat. A party set out to find the injured man, a senior chief petty officer. The rescuers spotted the victim stranded on tree roots on shore, but the boat could not navigate a nearby reef. Kimsey requested permission to swim to the victim, knowing that snakes had been sighted in the water on previous days. Kimsey calmly talked the man down to safety, and the boat picked them up.

Kimsey returned to the ceremonial guard after 3½ years of sea duty and became drillmaster. He is aware that the monotony and the inherent waiting involved with the guard influence members' morale. Dealing with attitudes became an important part of Kimsey's job. The routine of the guard involves continuous practice, hours of uniform preparation, more hours taken up by muster and travel time, and then the task at hand may take only five minutes. "We may have to rehearse at 5 a.m. at the Tomb of the Unknown Soldier—that means we get up at 3:30 or 4 in the morning."

Kimsey's involvement with the January

1982 Air Florida crash on the 14th Street Bridge in Washington started when he heard a news bulletin at his home in Alexandria, Va. He decided that with his rescue training he might be able to help. He donned his wet suit and found a ride over to the site and was put to work in a small boat, helping recover five bodies from the Potomac River.

Later he spent six months in Saudi Arabia teaching their drill team "a little English and a lot of military training." The team previously had learned to march British-style and carry other weapons. The Saudis responded to Kimsey's patient approach, although the language barrier slowed their progress somewhat. His teaching method was basically show and tell. "I just couldn't get mad," Kimsey said. "Because of the language barrier, what was simple to me was complex to them."

## STC (SW) Douglas Roberts

Chief Sonar Technician (SW) Douglas Roberts missed out on an appointment to the Military Academy at West Point, N.Y.,





after high school because of a football injury, but that disappointment never slowed him down. Today, a chief at age 24, Roberts has been in the Navy only 5½ years.

"We have a young Navy, and youth works in my favor," Roberts says. "The major point in anybody's job is that you have to lead by example. Whether you're young or old, if you're not competent, people will not listen to you. They won't take you seriously."

"I can do the job of a chief sonar technician. The promotion warrant stated that I will have to take on increased responsibility, and I am ready to handle it."

Aboard his last command, USS *Aylwin* (FF 1081), Roberts' responsibilities encompassed three work centers and about 30 men. He served as leading petty officer of the anti-submarine division, supervisor of the division's passive sonar work center and leading technician for the primary mission center.

"I wanted to learn more about the ship and be able to do more things," Roberts said. He earned the enlisted surface warfare specialist's silver cutlasses, and then became co-coordinator of a program to help his shipmates earn the designation.

Intrigued by the action on the bridge, Roberts studied to qualify as a junior officer of the deck (under way) and then as officer of the deck (under way). "I couldn't have done it," he said, "without the confidence of the captain and the other officers."

Roberts has spent most of his Navy career aboard ship. He credits his wife, Debra, for the support she has given him, especially during deployments. In turn, he also credits the Navy for recognizing the difficulties that wives go through in such separations. "The Navy's family service centers and the ombudsman program really do an outstanding job trying to make it easier."

#### EN1 Alfred F. Valderrama

Engineman First Class Alfred F. Valderrama combines his reserve duties with full-time studies at Arizona State University. He is a chemistry major and would like to work in naval research.

Valderrama enlisted in the Navy in 1972, then joined the reserve after completing his tour. At the reserve center in Phoenix,



**Disney World Salutes Pacific Sailor of the Year.** QMC (SW) Patrick M. Brophy waves to the crowd as he and wife Lisa, sons Patrick, 7, and Christopher, 5, and daughter Mary-Ann, 3, (not visible) ride at the head of the Mickey Mouse Parade at Walt Disney World in Florida. The family's vacation and Brophy's advancement to chief petty officer were part of the honors awarded to the Pacific Sailor of the Year.

©Walt Disney Productions.

he is the training officer for his unit, command career counselor and 3M coordinator for the entire center.

"Our unit drills once a month," he said, "but with all my collateral duties, I usually do twice as many non-pay drills as I do drills with pay."

Having served on active duty and in the reserve, Valderrama believes in the "One-Navy" concept.

"Sometimes when reserves come on board a ship for active-duty training, some regulars look upon it as a vacation. It's not a vacation to us. It's our only chance to excel—our only chance for training with actual hands-on experience. Without the support of our active-duty counterparts, we won't get trained."

Along with his studies and reserve duties, Valderrama is a volunteer in the Na-

val Sea Cadet Program. The Navy League-funded program for teens 14-18 mirrors the Navy in training and advancement. He holds the rank of lieutenant junior grade in the program and works as the unit's training officer. Valderrama's wife, Michele, a sea cadet warrant officer, serves as the unit's personnel officer.

Because Valderrama did not have one year in rank as a petty officer first class, he was not advanced with the other sailors of the year. His advancement to chief will become official in January 1984.

By the end of his week in Washington, Valderrama had added reason to smile about his upcoming promotion. He learned that his recall to active duty had been accepted, and he will be assigned to a ship in Long Beach, Calif.

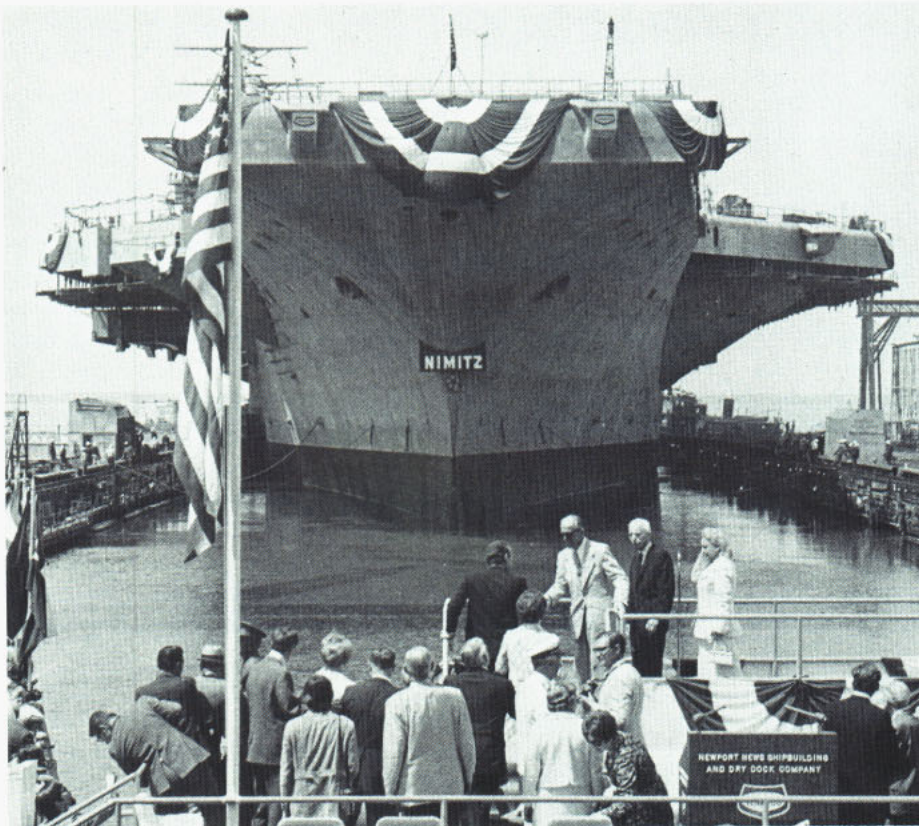
— By PH2 Liz Schading



## Mobile Airfields of the Sea

By JO1 P.M. Callaghan, NIRA Det. 206

*Beginning with this presentation, All Hands initiates a 12-part series on various classes of Navy ships—all of them new—such as the Spruance and Oliver Hazard Perry classes. With emphasis on the projected 15 carrier battle groups—part of the 600-ship Navy of the future—this installment deals with the nuclear-powered aircraft carriers of the Nimitz class. These ships include USS Nimitz (CVN 68), USS Dwight D. Eisenhower (CVN 69), USS Carl Vinson (CVN 70), the now-building Theodore Roosevelt (CVN 71), and the recently started Abraham Lincoln (CVN 72) and George Washington (CVN 73).*



A recent movie, “The Final Countdown,” is the story of a modern-day U.S. Navy aircraft carrier that was caught in a time warp and suddenly found itself steaming in Hawaiian waters on the morning of Dec. 7, 1941. Although top-name stars in the film drew plenty of attention, reviewers focused much commentary on the “biggest star of the show”: weighing in at just over 96,000 tons, the nuclear-powered aircraft carrier USS *Nimitz* (CVN 68).

The precedent for *Nimitz*, the second of the U.S. Navy’s nuclear-powered aircraft carriers, was set in 1958. That was the year the Navy broke new ground in naval construction by laying the keel of its first nuclear-powered flattop, USS *Enterprise* (CVN 65). Nearly 30 years after Fleet Admiral Chester W. Nimitz became Chief of Naval Operations at the close of World War II, the world’s biggest carrier was commissioned in 1975.

Two more ships of the class have since been commissioned: USS *Dwight D. Eisenhower* (CVN 69) and USS *Carl Vinson*





(CVN 70). And there was a break with tradition. CVN 70 was the first modern Navy warship to be named for a living American. The fourth ship of the class, *Theodore Roosevelt* (CVN 71), is under construction at Newport News, Va., and scheduled to be operational in 1988-89. Numbers five and six are scheduled to follow at three and five years later, respectively.

When work began on *Nimitz* in 1968, the Navy had a force of 15 attack carriers to support its missions worldwide, including the war which was then raging in Vietnam. In addition to *Enterprise*, the fleet had seven ships of the *Forrestal* class, all commissioned between 1955 and 1965 (an eighth, *John F. Kennedy*, was nearing completion). Seven other carriers belonged to *Midway* or *Essex* classes—both of World War II vintage.

It was the Navy's intention to replace the older *Essex*-class carriers with the *Nimitz* class, while modernizing the *Midway* class (two of them, *Midway* (CV 41) and *Coral Sea* (CV 43)), which are still serving with the fleet today).

Improvements had been made in nuclear propulsion since the days when *Enterprise* was launched. While that ship was powered by eight nuclear reactors, *Nimitz* needed only two. They are still "on line" today, providing enough power to propel each ship for at least 13 years of normal operation. Each ship is still several years away from having its nuclear core replaced (the energy that will have been expended in the cores when they are replaced is equivalent to about 462 million gallons of fuel).

The revolutionary use of nuclear power on board warships wasn't the only significant change being felt by the *Nimitz* class. The structure of naval air wings assigned to carriers was also undergoing a shift. Before the mid-70s, operational carriers had been classified as CVAs: "attack" carriers. *Nimitz* and *Eisenhower* were both originally designated as CVANs (nuclear attack carriers). The third nuclear ship in line, however, became known as CVN 70; the era of attack carriers was over.

Essentially, the change meant that aircraft carriers took on an expanded role. Earlier, the 80 or 90 planes which made up a carrier's air wing were almost entirely either fighter or attack aircraft, with a few reconnaissance, electronic warfare and in-flight refueling types thrown in. But with the increasing Soviet submarine threat in the 1970s, defensive countermeasures at the task force level were in order and more emphasis was placed on ASW.

*Carl Vinson* was designed to accommodate not only the usual complement of fighter/attack aircraft (such as F-14 *Tomcats* and A-7 *Corsairs*), but room was also made for a squadron of anti-submarine warfare aircraft: S-3 *Vikings* and SH-3 *Sea Kings*, among others. However, because the *Nimitz* class was designed to support a larger air wing than its predecessors, these huge carriers were able to absorb the ASW mission with a minimal trade-off of their attack and fighter aircraft.

The offensive potential of the *Nimitz*-class carriers is remarkable. They are expensive ships (the new *Roosevelt* is expected to cost more than \$2.1 billion), but one must keep in mind that each ship of this class carries 90 percent more aviation fuel and 50 percent more ordnance and ammunition than any of its *Forrestal*-class

counterparts. The *Nimitz* class is also equipped with anti-submarine classification and analysis centers, which permit the carriers to share target data instantly with ASW aircraft and task force escorts.



Since the commissioning of USS *Carl Vinson* (CVN 70) last year, the *Nimitz* class is three vessels strong, each manned by more than 5,000 men and carrying a complement of about 100 aircraft, including F-14 *Tomcat* fighters, E-2C *Hawkeye* early warning planes and A-6 *Intruder* all-weather attack planes. With *Theodore Roosevelt* waiting in the wings, it appears that the *Nimitz* class—biggest of the flat-tops—will be around to lead carrier battle groups on missions of sea control far into the 21st century.

#### Nimitz-class nuclear-powered aircraft carriers:

Hull number/Name	Laid Down	Launched	Commissioned
CVN 68 <i>Nimitz</i>	6-22-68	5-13-72	5-3-75
CVN 69 <i>Dwight D. Eisenhower</i>	8-15-70	10-11-75	10-18-77
CVN 70 <i>Carl Vinson</i>	10-11-75	3-15-80	3-13-82
CVN 71 <i>Theodore Roosevelt</i>	10-31-81		
CVN 72 <i>George Washington</i>			
CVN 73 <i>Abraham Lincoln</i>			



# Fair Winds and Following Seas

*All Hands* and the U.S. Navy bid farewell recently to editor John F. Coleman who retired in October after 34 years of government service. Twenty of those years were spent as an active-duty Navy journalist covering Navy people and events all over the world. The other 14 years were as a Navy civilian writer-editor and public information specialist.

Coleman's wide travels with the Navy—in-

cluding service on the battleship *Wisconsin* (BB 64), light cruiser *Worcester* (CL 144), carrier *USS Forrestal* (CV 59) and Antarctic duty with VX (Antarctic Squadron) Six—made him familiar with distant corners of the world. His acquaintance with various shorelines and skylines was more than just a nodding one, and from his editor's office in Washington, D.C., he could readily identify photographs of Navy ships in various harbors around the world: Guantanamo Bay, Acapulco, San Diego, New York, Charleston, Seattle, Diego Garcia, Yokosuka, Subic Bay.

After retirement as a chief journalist, Coleman joined *Navy Times* as an associate editor, a position he held for four years. That was followed by one year with *Sealift* magazine, and then 13 years at *All Hands*.

In September 1976, Coleman assumed stewardship of *All Hands*, the Navy's flagship publication, setting the high journalistic standards the magazine exhibits today. He was the driving force in introducing color and turning to the use of larger typeface in the magazine.

While concentrating on the mechanics of magazine publishing, Coleman never lost sight of the purpose of *All Hands*—nor of its audience. His belief that it was a publication primarily for fleet sailors set the tone of the magazine. His dictum that staff writers address the needs of an audience of sailors was hammered home to every new journalist reporting in to the *All Hands* offices.

"Read," he would say. "Know more about what you're writing. Know more about your Navy. Forget about yourself and think of the people out there."

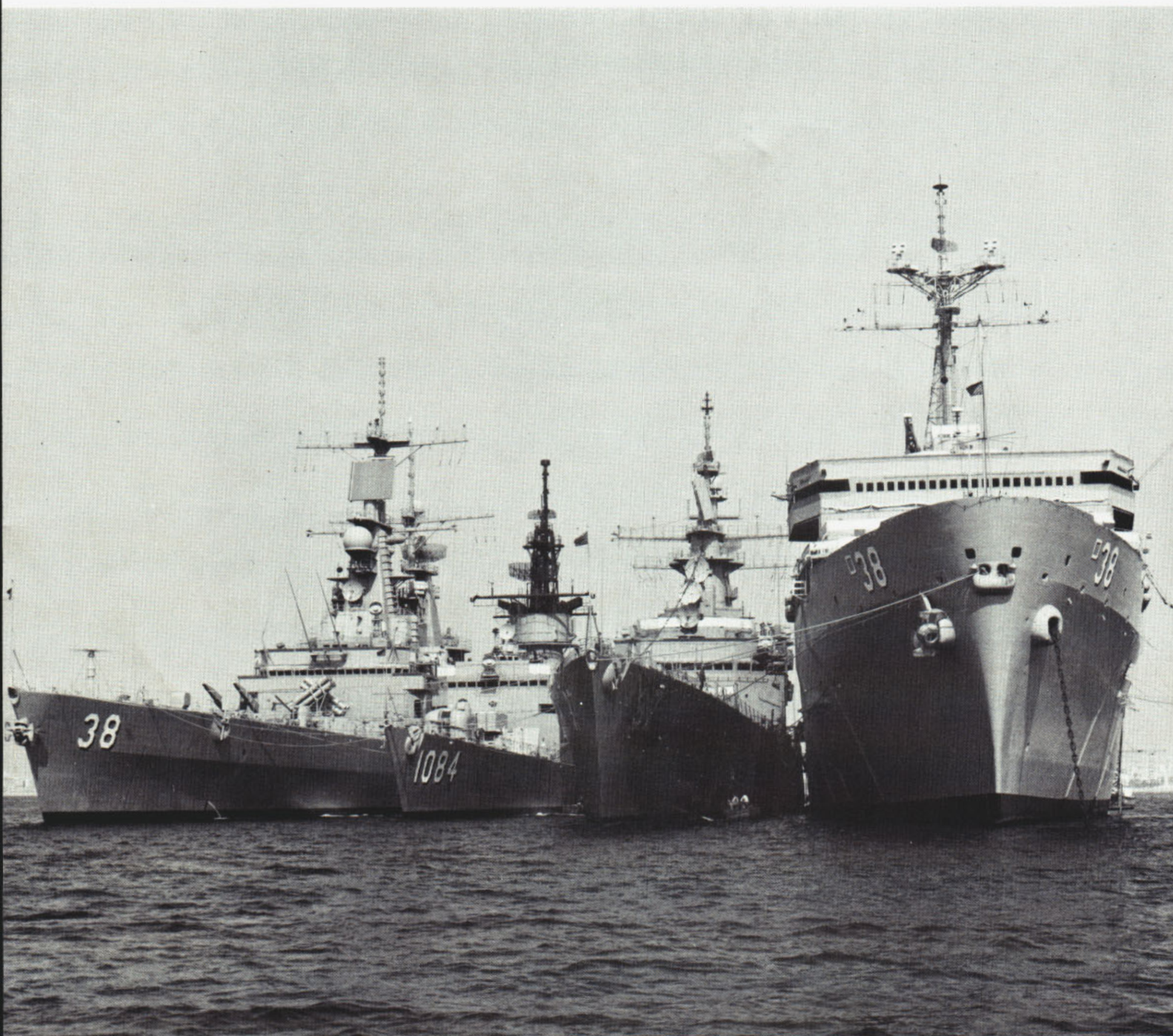
During Coleman's editorship, *All Hands* evolved from what could best be described as a "house organ" into the premier internal publication of the U.S. Navy. It was during this time, also, that *All Hands* moved from the old Bureau of Naval Personnel to the Navy Internal Relations Activity.

Perhaps John Coleman's attitude toward the brand of journalism he espouses—be it in originating a story idea or rewriting a newcomer's first attempt—is stated succinctly in the sign on his door, which he left behind as his parting gift: "Silk Purse Department—Deposit Ears in Basket."



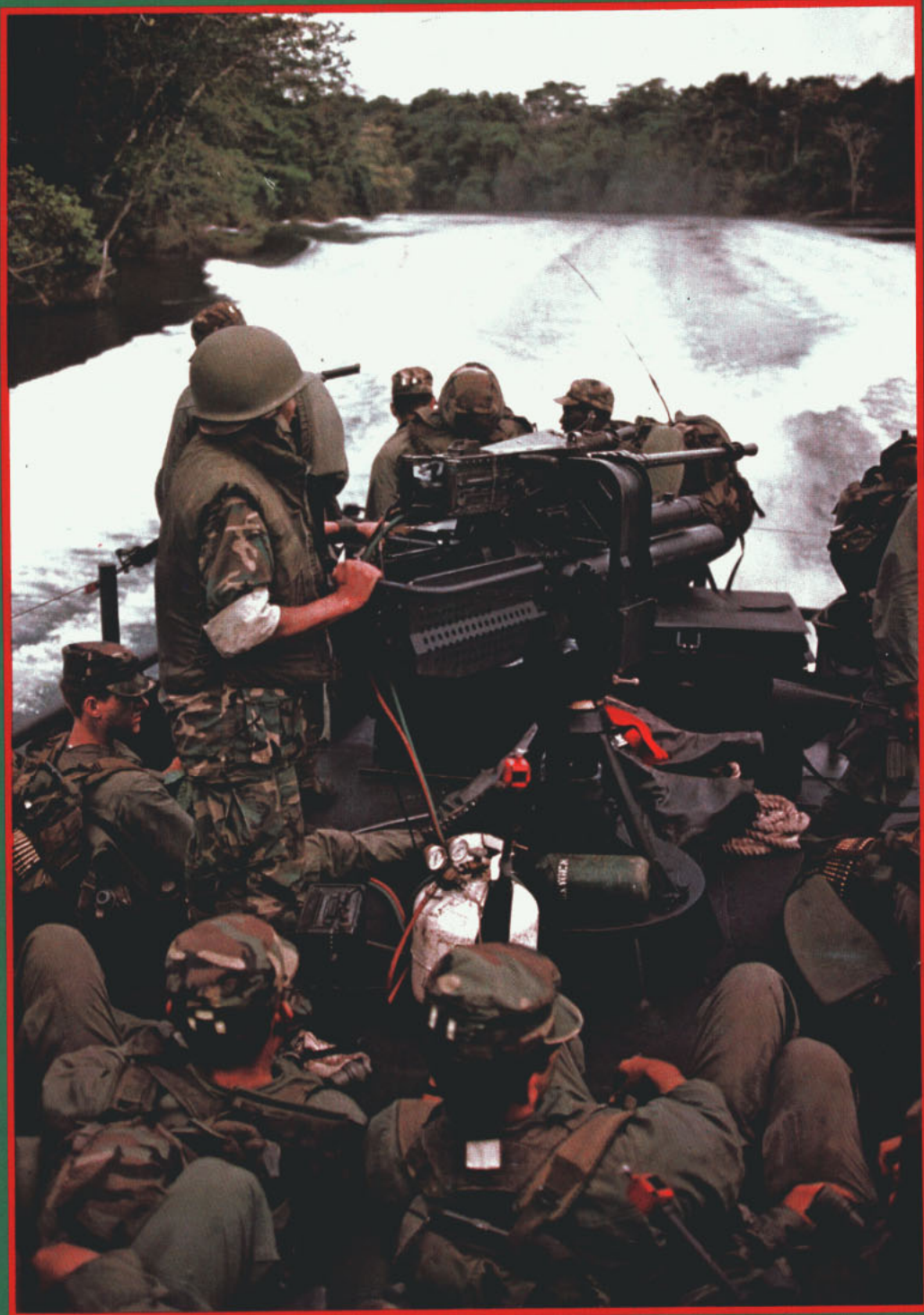
Drawing by DM2 Eugene Clark





*Birds of a feather...Destroyer Tender USS Puget Sound (AD 38), Sixth Fleet flagship, nests off Athens, Greece, with nuclear-powered cruisers USS Virginia (CGN 38) and USS South Carolina (CGN 37) and frigate USS McCandless (FF 1084). Photo by PH2 Dorothy J. Affeldt.*





**Reservists in Panama • See page 28**